University of Alberta

Exploring Older Adults' Perceptions of Physical Activity and Current Leisure Activity Participation in Rural Newfoundland

by

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Dedication

This thesis is dedicated to the memory of my late grandparents, George and Amelia, from whom I learned much about aging.

Abstract

Older adults in Newfoundland (NL) are less active than the Canadian average. Given the unique rural NL context, efforts to promote physical activity participation will likely require approaches that are different than those taken in other parts of Canada. The purpose of this study was to explore the nature of physical activity participation and perceptions of being physically active among older adults in rural NL. In-depth interviews were conducted with 10 participants ($\bar{X}$ = 82 yrs; R = 70-94). Data analysis followed the tenets of grounded theory and resulted in three main categories: "historical context," "current leisure-time activity," and "strategies for a successful old age." In youth, participants spent most of their time working and little time engaged in leisure activity. Participants valued being "busy" but were not currently involved in regular physical activity. Beliefs about aging and age-appropriate activity affected participants' current levels of physical activity.

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CHAPTER 1. INTRODUCTION

The proportion of Canadians over the age of 65 has increased by nearly two-thirds over the past half century. In 1950, less than 8% of Canadians were over the age of 65, as opposed to nearly 13% in 2000 (United Nations, 2002). Over the last 50 years, Canadians aged 80 years and older have become the fastest growing cohort in the nation, presently growing at a rate of approximately 3.8% per year. Members of this cohort now comprise over 3% of Canada's population (United Nations, 2002).

These demographic shifts have been described as the "greying" of Canada's population (Mooney, Knox, Schacht & Nelson, 2004) and will have a significant impact on a variety of economic, political and social issues (United Nations, 2002). One area that has received particular attention has been the impact of population aging on the sustainability and viability of health/medical care. Some hold the view that the medical costs associated with caring for increasing numbers of older adults will spell disaster for society, serving to bankrupt the health care system (Aaron & Schwartz, 1990; Callahan, 1987, 1993, 2002; Fuchs, 1999). Others however, have questioned the logic of this "apocalyptic demography" and have argued that attributing inevitable "doom" to population aging per se is ill founded, and grossly oversimplified (Evans, McGrail, Morgan, Barer & Hertzman, 2001; Gee & Gutman, 2000).

Though population aging may not lead the population into the apocalypse, a number of chronic diseases are associated with aging. Increased age is the dominant risk factor for heart disease and stroke (Heart & Stroke Foundation of Canada, 1999). The prevalence of diabetes also increases with age (Health Canada, 2002). If current demographic trends continue, it stands to reason that even greater numbers of older adults

will suffer from at least one of these chronic diseases in the future. Rosenberg and Moore (1997) in fact, have argued that individuals over the age of 75 will be especially likely to require increased health care support.

Although age may play a role in current rates of chronic disease, in terms of health status, the healthy lifestyle practices of older adults are also important factors to consider. Despite the appeal of equating age with disability or ill health, it is important to realize that significant health gains, from a population health perspective, can be achieved with the adoption of healthier lifestyle practices (Health Canada, 1999a). In fact, research indicates that healthy lifestyles are more influential than genetic factors in enabling older adults to avoid degeneration typically associated with aging; people who live healthily have half the rate of disability of those who do not (Centers for Disease Control and Prevention, 2002). Consequently, a re-prioritizing of the health care agenda that moves toward a stronger adoption of disease prevention and health promotion, rather than focusing primarily on the treatment of disease, will benefit the aging population; challenging existing stereotypes that equate old age with disease and frailty.

The majority of health research to date has been conducted within people in urban areas (Higgs, 1999). Although the results stemming from this body of research may generalize to the majority of Canadians, they may not necessarily generalize to the remaining one-fifth, or approximately 6 million Canadians who live in rural areas (Statistics Canada, 2001a). Given the uniqueness of many rural areas, it is important to examine health issues through a "rural lens" (Pong et al., 1999). The success of health promotion efforts may be contingent upon the nature of particular geographical areas, as health practices may differ between rural and urban areas.

Several explanations have been offered as to why we might expect the health status and health behaviours of people in urban and rural areas to differ. For example, traditional rural values of individualism and self-sufficiency may work to foster the adoption of personalized health promoting behaviours (Mansfield, Preston & Crawford, 1989) or the actual rural environment, with its cleaner air, less congestion, and slower pace of life may contribute to better health (Krout, 1989). On the other hand, maintaining individual health in rural areas is thought to be more challenging given that such areas are often worse off economically, educationally, and have less adequate medical services (Krout, 1989; Mansfield et al., 1989; Pong, 2000). Pong (2000, p. 262) suggested,

> …there are major problems in rural health-care delivery. The perpetual and often critical shortages of physicians and other practitioners is [*sic*] well known. Centralisation of many health services in larger cities means that rural residents have more difficulties accessing services than their urban counterparts. The lack of community services in many small towns means that patients discharged early from hospitals often lack community-based care. The list goes on.

Although the number of physicians in a given area and the distance to a hospital are certainly important considerations for any community (Krout, 1989), there are other challenges unique to rural areas. Recreational opportunities may also play an important role in the maintenance and health promotional aspects of health care. In fact, those who live closer to such services and facilities are healthier than those who live farther away (Schreyer & Driver, 1989; Booth, Owen, Bauman, Clavisi & Leslie, 2000). Currently however, there is an overall lack of structured recreational services and formal

recreational facilities in rural communities compared to more urban areas (Craig, Cameron, Russell & Beaulieu, 2001; Long, 1989).

Regular participation (30-60 minutes of moderate physical activity per day) in leisure-time physical activity has been found to be predictive of good health and positive well-being (Gauvin & Spence, 1996; Landers & Arent, 2001). Regular aerobic activity, for example, has been shown to decrease the risk of contracting cardiovascular disease (in particular, coronary heart disease) colon cancer, non-insulin dependent diabetes mellitus, as well as all-cause mortality (Boileau et al., 1999; Health Canada, 1999a; U.S. Department of Health and Human Services, 1996). Similarly, regular participation in resistance and strength training exercises has also been shown to improve the health of older adults (Fiatarone et al., 1994; Haykowsky, Ezekowitz & Armstrong, 2004). Such exercises have been shown to decrease cholesterol (Prabhakaran, Dowling, Branch, Swain & Leutholtz, 1999), and decrease blood pressure (Hare, Ryan, Selig, Pellizzer, Wrigley & Krum, 1999).

This well-established link between regular physical activity and health suggests that current rates of chronic disease (i.e., heart attacks, strokes, and diabetes) would decline, if a greater proportion of older adults were to become physically active. Despite the numerous health benefits of regular physical activity, over 60% of Canada's population who are 65 years of age and older remain physically inactive (Craig, Russell, Cameron & Bauman, 2004).

Initiatives to promote regular physical activity in Canada have been met with limited success. One such initiative was the development of Canada's Physical Activity Guide for Older Adults (Health Canada, 1999b). Current guidelines recommend older

adults "accumulate 30 to 60 minutes of moderate physical activity most days" (Health Canada, 1999b). Although no study to date has examined the level of awareness of the older adult physical activity guide among Canadians, the awareness levels of Canada's adult physical activity guide are relatively low, reported to be less than 21% in a random sample of Albertans (Spence, Plotnikoff & Mummery, 2002). From a population health perspective, the promotion of physical activity participation has proven to be a challenging undertaking.

When discussing the physical activity participation of Canadians it is important to note that regional, as well as geographical differences exist. In Canada, rates of physical activity decline from west to east (Craig & Cameron, 2004). People living in the Atlantic provinces are members of the most physically inactive region in Canada (Statistics Canada, 2002). Although a host of explanations can be generated to explain why this is the case, no research to date has attempted to explore the nature of physical activity participation among Atlantic Canadians.

The population of the Atlantic provinces is older than the national average with the exception of PEI whose population is younger (Statistics Canada, 2002). The median age of rural and small town areas within these provinces are also higher than the national average of 39 years. Overall, the population of these areas is growing older more rapidly than the Canadian average (Statistics Canada, 2002). Another unique feature of this region is the proportion of people living in rural or small town areas. The proportion of Atlantic Canadians residing in rural areas is more than double the Canadian average of 20.3% (Statistics Canada, 2002). Each of these characteristics may affect the nature of physical activity participation in this region.

Rationale for Physical Activity Research Within Newfoundland & Labrador

Over the last number of years the needs of rural Canadians have begun to garner more attention, with the establishment of such initiatives as the Canadian Rural Partnership (Statistics Canada, 1998). Although access to health care is considered to be one of the key priorities for attention, there has been little research emphasis placed upon influencing the adoption of health promoting behaviours (e.g., physical activity) in rural areas. Given the proportion of older adults in rural Atlantic Canada, it is important to learn more about local beliefs and barriers that undermine activities of older adults living in rural settings.

Newfoundlanders and Labradorians are conspicuous in terms of a number of health-related statistics. For instance, people are less likely to report being regularly physically active than the Canadian average (38.1% vs. 42.6%) while over 63% of adults aged 20 and over report being physically inactive (Statistics Canada, 2002). In fact, Newfoundlanders are the least active adults in Canada (14% are regularly active) and have actually increased rates of physical inactivity from 1998 – 2000 (61% - 63% respectively) (Statistics Canada, 2003). Among older adult Canadians, Newfoundlanders are the least physically active. Nearly 70% of Newfoundlanders aged 65 and over report being physically inactive (Statistics Canada, 2003).

Given current rates of physical inactivity, it is not surprising that compared to the other nine provinces of Canada, Newfoundland and Labrador also has the highest rates of diabetes (Statistics Canada, 2001b), obesity (Craig & Cameron, 2004), acute myocardial infarctions and cardiovascular disease (Reeder & Taylor, 1999). There is a need to explore the nature of these health problems, as it is reasonable to suggest that these health

conditions may be at least partially attributed to relatively low rates of physical activity over the life course.

Given the unique rural Newfoundland context, the underlying nature of performing health promoting behaviours in this province (i.e. participating in physical activity) is likely different than in other parts of Canada. Although the mechanisms responsible for regional differences in physical activity are not well understood, it is likely that the current health status of older rural Atlantic Canadians is, at least in part, due to leading physically inactive lives.

O'Brien Cousins (2003) argued that understanding exercise/physical activity motivation is vital to the development of strategies aimed to increase physical activity participation. Currently however, little is known about exercise/physical activity motivation among rural older adults in Atlantic Canada. What we do know is that health promotion efforts are underway in population dense areas, and such efforts are likely to be more accessible to adults in larger towns and cities. Rural older adults, who have limited access to health promotion resources, should garner special attention given current trends of large out-migration of younger people, and the "aging in place" of older adults within particular rural areas (Statistics Canada, 2001c). Exploring the perceptions and beliefs related to physical activity participation of older adults in rural Newfoundland, therefore, may enhance current understanding of factors that contribute to this region's physical inactivity. Pong (2000, p.262) stated, "Because the health problems confronting rural Canada are serious, complex, and changing, research should have a critical role to play in examining the nature of these problems…" Developing a better understanding of older adults' perceptions of physical activity is a fundamental step

towards developing future health promotional campaigns or intervention studies in rural Newfoundland, aimed at improving health by promoting increased physical activity participation.

Purpose

The purpose of this study is to explore the nature of physical activity participation and perceptions of being physically active among older adults in rural Newfoundland communities. To this end, the historical context of physical activity is presented, along with an exploration of perceptions and beliefs related to being physically active. By exploring the perceptions towards physical activity participation, this study is a preliminary step towards developing a better understanding of what may constitute an effective health promotion strategy to increase physical activity participation in rural areas of Newfoundland.

General Research Questions

The over-arching questions that guide this research study are:

a) How have participants experienced physical activity during their lives?

b) What are the perceptions and beliefs that older adults living in rural Newfoundland hold towards physical activity?

Definition of Key Terms

This study uses several terms that although in common usage have oftentimes been conceptualized differently. To prevent ambiguity, this study's usage of the terms rural, physical activity, leisure, and health are defined below.

Rural

Given Canada's cultural and geographic variation, it is fair to say that "rural" communities nestled along the North East coast of Newfoundland, are different than rural communities located along the periphery of the Golden Horseshoe in Ontario. In order to help researchers select the most appropriate definition of "rural," and to aid in comparisons, du Plessis, Beshiri and Bollman (2002) have outlined six possible definitions: (a) Census rural areas, (b) rural and small town (RST)/ Metropolitan area and census agglomeration Influenced Zones (MIZ), (c) Organization for Economic Co-operation and Development (OECD) rural communities, (d) OECD predominately rural regions, (e) non-metropolitan regions, and (f) rural postal codes. The locations in which data were collected for this study fit all six rural definitions.

Census "rural areas." Population living outside places of 1,000 people or more OR population living outside places with densities of 400 or more people per square kilometre.

"Rural and small town (RST) / Metropolitan area and census agglomeration Influenced Zones (MIZ)." Population living outside the commuting zone of larger urban centres (of 10,000 or more). Urban areas with populations less than 10,000 are included in RST together with rural areas if they are outside the main commuting zones of larger urban centres. MIZ disaggregates the RST population into four sub-groups based on the size of commuting flows to any larger urban centre (of 10,000 or more).

OECD "rural communities." Population in communities with densities less than 150 people per square kilometre.

OECD "predominately rural regions." Population in regions where more than 50 percent of the people live in an OECD "rural community."

"Non-metropolitan regions." Population living outside of regions with major urban settlements of 50,000 or more people. Non-metropolitan regions are subdivided into three groups based on settlement type, and a fourth based on location in the North. The groups based on settlement type are further divided into "metropolitan adjacent" and "not adjacent" categories. Non-metropolitan regions include urban settlements with populations of less than 50,000 people and areas with no urban settlements (where "urban settlements" are defined as places with a population of 2,500 or more).

"Rural Postal codes". Areas serviced by rural route mail delivery from a post office or postal station ("0" in the second position of a postal code denotes a "rural" postal code).

Physical Activity

For the purposes of this study, physical activity refers to "bodily movement that is produced by the contraction of skeletal muscle and that substantially increases energy expenditure" (U.S. Department of Health and Human Services, 1996, p. 20).

Health

This study adopts the following definition of health:

> [Health]...has to do with the bodily, mental, and social quality of life of people as determined in particular by psychological, societal, cultural, and policy dimensions. Health is...to be enhanced by sensible lifestyles and the equitable use of public and private resources to permit people to use their initiative individually

and collectively to maintain and improve their own well-being, however they may define it (Rootman & Raeburn, 1994, p. 69).

Leisure Activity

Leisure activity in this study is defined as "a person's own perception and inference of quantity and quality of activities…[the] subjective perception of an actual or imagined activity a person participates in at a given time" (Iso-Ahola, 1976, p. 7).

Older Adult

For the purposes of this study, the term "older adult" is used to refer to adults who are 65 years of age or older. The use of this term is not meant to suggest that everyone aged 65 or older experiences aging uniformly. Rather, it is a way to talk broadly about two previously identified age categories simultaneously ('young-old' & 'old-old') (Neugarten, 1974).

CHAPTER 2. REVIEW OF LITERATURE

This section reviews bodies of literature related to a) urban and rural differences in subjective health and physical activity participation, b) older adult physical activity participation, c) physical activity theory, and d) leisure activity theory.

Studies Comparing Rural and Urban Participants

Within the forthcoming review of literature, definitions of "rural" and "urban" varied widely across studies. Table 1 presents a partial list of the definitions used in the literature reviewed. Although this list is not exhaustive, it does provide a brief overview of the most commonly used definitions of "rural" and "urban" within the literature.

Note also, that in some cases, samples were not dichotomously separated into "rural" and "urban" categories, since some researchers have viewed such a dichotomous distinction as inappropriate. Alternatively, researchers have conceptualized urban and rural areas as different points along an urbanization continuum. For instance, Cook et al. (1998) classified their sample on a continuum of "central or fringe metropolitan," "metropolitan," "urban (population 20 000 – 49 999)," "urban (population 2500 – 19 999)," and "rural." Similarly, Krout (1989) distinguished between "non-metropolitan rural," "non-metropolitan urban," "metropolitan non-central city," and "metropolitan central city" while Phillimore and Reading (1992) defined areas as "cities," "large towns," "small towns," or "rural" areas. Finally, Speake, Cowart & Stevens (1991) utilized a 9-point residential continuum to classify participants' area of residence.

The first objective of this section of the literature review is to report on and synthesize empirical research findings related to the health status of rural citizens. This objective was guided by the question, "Are there health differences between rural and

urban citizens?" The second objective is to report on and synthesize empirical research findings related to the physical activity levels of rural citizens. This objective was guided by the question, "Are there differences in levels of physical activity between rural and urban citizens?" What follows is a two-part review of empirical research that firstly, reviews studies that compare the health status of rural and urban citizens, and secondly reviews studies that compare the physical activity levels of urban and rural citizens.

Table 1

Selected Rural and Urban Definitions from the Reviewed Literature

Authors	Definition
Speake et al. (1991)	Rural: Populations between 2500 – 9999, or fewer; community outside a standard metro. statistical area (SMSA)
Cook et al. (1998)	Rural: Populations of 2500 or less
Krout (1989)	Rural: Populations of 2500 or less
Morgan et al. (2000)	Rural: $\leq$ 1.4 people/hectare
Mainous & Kohrs (1995)	Rural: Communities outside a SMSA Study also asked participants whether or not they lived in a rural area
McMurray et al. (1999)	Rural: Communities outside a SMSA
Mansfield et al. (1989)	Rural: Community outside a SMSA
Speake et al. (1991)	Urban: Populations between 50 000 and 499 999
Cook et al. (1998)	Urban: Populations between 2500 and 1 000 000
Krout (1989)	Urban: Populations > 2500
Phillimore & Reading (1992)	Urban: Populations >5000

"Rural health advantage"

Table 2 presents the data from 11 studies (Clayton et al., 1994; Gillanders, Buss & Hofstetter, 1996; Johnson, Ratner & Bottorff, 1995; Krout, 1989; Mainous & Kohrs, 1995; Naimark, Naimark, Tate, Sigurdsson & Axelsson, 1996; Phillimore & Reading,

1992; Reyes, Tan & Malina, 2003; Ringsberg, 1993; Rutenfranz, Andersen, Seliger & Masironi, 1982; Speake et al., 1991) that have compared the health of individuals who reside in different geographical locations (including physical fitness).

Table 2

Summary of Empirical Articles Examining Urban/Rural Health Differences

Authors	Title	Sample	Results	Rural Advantage?
Phillimore & Reading (1992)	A rural advantage? Urban-rural health differences in northern England	N = 678 "wards"	Remote rural areas are healthier	Yes
Mainous & Kohrs (1995)	A comparison of health status between rural and urban adults	N = 661	Metro: Higher assessments of health status	No
Speake et al. (1991)	Healthy lifestyle practices of rural and urban elderly	N = 343	Place of residence not predictive of lifestyle practices	-
Clayton et al. (1994)	The influences of rural/urban residence on health in the oldest-old	N = 84	Rural: Higher levels of functional health	No
Naimark et al. (1996)	Cardiac structure and exercise blood pressure in urban and rural Canadian men of Icelandic descent	N = Not reported	Rural: Higher cardiovascular functioning	Yes
Gillanders et al. (1996)	Urban/rural elderly health status differences: The dichotomy re-examined	N = 2300	Health status improved when moving from rural to urban areas	No
Krout (1989)	Rural versus urban differences in health dependence among the elderly population	N = 600	Rural: Less health dependence	Yes
Rutenfranz et al. (1982)	Health standards in terms of exercise fitness of school children in urban and rural areas in various European countries.	N = Not reported	Rural: Lower physical fitness	No
Reyes et al. (2003)	Urban-rural contrasts in the physical fitness of school children in Oaxaca, Mexico	N = 679	Rural children: Higher absolute grip strength, less abdominal strength	Yes
Ringsberg (1993)	Muscle strength differences in urban and rural populations in Sweden	N=933	Leg extension strength greater in rural men/women	Yes
Johnson et al. (1995)	Urban-Rural differences in the health-promoting behaviours of Albertans	N = 853	No differences in frequency of exercise	-

Five studies were conducted in the U.S. (Clayton et al., 1994; Gillanders et al., 1996; Krout, 1989; Mainous & Kohrs, 1995; Speake et al., 1991), three in European countries (Phillimore & Reading, 1992; Ringsberg, 1993; Rutenfranz et al., 1982) two in Canada

(Johnson, Ratner & Bottorff, 1995; Naimark et al., 1996) and one in Mexico (Reyes et al., 2003).

In terms of physical fitness, rural participants have been reported to possess significantly greater muscle strength than urban participants. For instance, Ringsberg (1993) found that the leg extension strength for rural men and women (244Nm and 145Nm respectively) exceeds that of urban men and women (213Nm and 113Nm respectively). Flexion strength was also greater in rural men (104Nm as opposed to 97Nm in urban men) and rural women (57 Nm as opposed to 56 Nm in urban women). Even among rural and urban children aged 6-13 years, physical fitness differences have been reported. For instance, Reyes et al. (2003) found that rural children demonstrated a 1-2 kg better grip strength than urban children. Rural boys, on average, had a grip strength of 30 kg (as compared to 29 kg for urban boys, $p < .05$) while rural girls, on average, had a grip strength of 28kg (as compared to 26.6kg for urban girls, $p < .05$). Other studies have reported that rural participants are less obese, have lower diabetes rates, and less frequently suffer from high cholesterol or hypertension when compared to urban participants (Naimark et al., 1996; Taylor et al., 1992).

In terms of subjective health, Phillimore and Reading (1992) have found those who live in remote rural areas have better overall health than those who live in urban centres. Conducting interviews with a random sample of 600 community dwelling adults (aged 65+) Krout (1989) demonstrated that urban older adults were less dependent on others for care. Additionally, Clayton et al. (1994) reported increased degrees of physical independence among rural elderly participants, aged 100+, compared to urban elders.

Rural "health disadvantage"

Despite the findings above, other studies involving children have found those from rural areas to be less physically fit than those from urban areas (Rutenfranz et al., 1982). Reyes et al. (2003) found rural children possessed less explosive power than urban children. In this study, rural boys, on average, had a long-jump distance of 101 cm (as compared to 118 cm for urban boys) while rural girls, on average, had a long-jump distance of 85cm (as compared to 100 cm for urban girls). All differences were reported to be statistically significant ($p < .001$). Reyes et al. (2003) have also found a similar pattern with regards to abdominal strength. Rural boys, on average, performed 10 sit-ups (as compared to 13 for urban boys) while rural girls, on average, performed 7 sit-ups (as compared to 10 for urban girls). Once again, all differences were statistically significant ($p < .001$). Similarly, McMurray, Harrell, Bangdiwala & Deng (1999) reported a rural disadvantage. Their findings reveal higher body mass indices (BMIs) and sum of skin folds for rural children compared to urban children, where 29.5% of rural versus only 21.7% of urban children are obese ($p < .0001$).

Studies comparing adult samples also report a rural disadvantage. In terms of functional health, Clayton et al. (1994) found rural people older than 100 years were worse off than urban elderly of the same age. Similarly, Mainous and Kohrs (1995) found that rural elderly possess significantly poorer health status than their urban counterparts. Specifically, rural elders had significantly poorer physical and social functioning as well as poorer general mental health, and poorer general health perceptions. Finally, Gillanders et al. (1996) observed an improvement in health status (as measured by

medical conditions, use of medical aids, and symptoms) as the degree of urbanization of areas increased, from rural to urban.

Physical Activity/Exercise

Table 3 presents the data from 14 articles that have examined the physical activity levels of rural and urban participants (Cook et al., 1998; Felton et al. 2002; Gillanders et al., 1996; Johnson et al., 1995; Lim & Taylor, 2005; Mansfield et al., 1989; McMurray et al., 1999; Morgan, Armstrong, Huppert, Brayne & Solomou, 2000; Parks, Housemann & Brownson, 2003; Potvin, Gauvin & Nguyen, 1997; Sjolie & Thuen, 2002; Taylor et al., 1992; Wilcox, Castro, King, Housemann & Brownson, 2000; Yamauchi, Umezaki & Ohtsuka, 2001). Eight articles were conducted in the U.S. (Cook et al., 1998; Felton et al. 2002; Gillanders et al., 1996; Lim & Taylor, 2005; Mansfield et al., 1989; McMurray et al., 1999; Parks et al., 2003; Wilcox et al., 2000), two in Canada (Johnson et al., 1995; Potvin et al., 1997) two in islands in the South Pacific (Taylor et al., 1992; Yamauchi et al., 2001), and two in European countries (Morgan et al., 2000; Sjolie & Thuen, 2002). Each of these articles assessed current involvement in leisure-time physical activity across geographical location. Results are once again mixed in terms of rural advantage and disadvantage.

Cook et al. (1998) reported that leisure-time inactivity is highest in rural areas (36.6%) and lowest in central metropolitan areas (27.4%). Similarly, in a study conducted with female participants, Wilcox et al. (2000) reported that rural women are more likely to be sedentary than urban women, partially due to the perception of exercise barriers. Significantly greater proportions of rural citizens felt as though they were discouraged from exercising (6.9%) were fearful that they would be injured while exercising (17.1%)

or were concerned for their safety (22.5%) as compared to urban citizens (4.2%, 12.9% and 17.8% respectively). Similarly, Parks et al. (2003) reported that the presence of barriers were important predictors of activity, especially for rural individuals. Nearly 17% of rural adults felt as though they could not exercise due to their poor health, while only 11% of urban adults perceived their health as a barrier to being more active (Parks et al., 2003). Parks et al. (2003) reported that rural residents are least likely to meet physical activity recommendations, while suburban people were most likely.

Not all studies repored that rural adults are less active than their urban counterparts, however. A study conducted by Potvin et al. (1997) collected physical activity data on parents of school children. This information was used to "stage" participants based on the five stages of change of the transtheoretical model (Prochaska & Diclemente, 1982). Findings indicated that rural parents were less likely to be "precontemplators" in terms of being active (6.3% versus 10.4 % of suburban and 15.4% of inner city parents) and were the most likely to be active (47% in the "action" stage, versus 28.2% of suburban and 28.8% of inner city parents). Similarly, Taylor et al. (1992) reported higher levels of leisure-time physical activity among rural citizens, where only 50% of urban males and 48% of urban females reported being "active" compared to 79% of rural males and 85% of rural females, while Lim and Taylor (2005) reported that 52.7% of rural adults as opposed to 47.6% of urban adults were performing adequate amounts of physical activity. Other studies have reported comparable levels of physical activity (68% of rural citizens; Sanderson et al., 2003) while Yamauchi et al. (2001) found that sessions of physical activity for rural citizens lasted longer, on average, than those for urban citizens.

Table 3

Summary of Empirical Articles Examining Urban/Rural Physical Activity Differences

Authors	Title	Sample	Results	Rural Advantage?
Cook et al. (1998)	Self-reported p.a. by degree of urbanization – U.S.	N = 118,778	Inactivity lowest in central metro (27.4%) Highest in rural (36.6%)	No
Wilcox et al. (2000)	Determinants of leisure time p.a. in rural compared with urban older and ethnically diverse women in the U.S.	N = 2912	Rural women more likely to be sedentary than urban women	No
Potvin et al. (1997)	Prevalence of stages of change for physical activity in rural, suburban, and inner-city communities	N = 4748	Rural participants most likely to be "actors." Urban participants least likely	Yes
Morgan et al. (2000)	Healthy ageing in urban and rural Britain: a comparison of exercise and diet	N = 2041	Overall activity levels for urban and rural very similar	-
Parks et al. (2003)	Differential correlated of p.a. in urban and rural adults of various socioeconomic backgrounds in the U.S.	N = 1818	Rural residents least likely to meet p.a. recommendations	No
Taylor et al. (1992)	Dietary intake, exercise, obesity and noncommunicable disease in rural and urban populations of three pacific island countries	N = 6315	Rural: Less obese, higher levels of PA, less diabetes, less cholesterol, less hypertension	Yes
Sjolie & Thuen (2002)	School journals and leisure activities in rural and urban adolescents in Norway	N = 88	No differences in activity patterns	-
Felton et al. (2002)	Differences in physical activity between black and white girls living in rural and urban areas	N = 1668	No differences in activity patterns	-
McMurray et al. (1999)	Cardiovascular disease risk factors and obesity of rural and urban elementary school children	N = 2113	Rural: Higher BMI; No differences in physical activity	Varies
Yamauchi et al. (2001)	Influence of urbanization on physical activity and dietary changes in Huli-speaking population: a comparative study of village citizens and migrants in urban settlements	N = 56	Rural: Shorter sedentary periods, longer active periods	Yes
Lim & Taylor (2005)	Factors associated with physical activity among older people-a population-based study	N = 8881	Rural: Independently associated with adequate physical activity (52.7% of rural active vs. 47.6% of urban active	Yes
Gillanders et al. (1996)	Urban/rural elderly health status differences: The dichotomy re-examined	N = 2300	Rural people spent sig. less time walking	No
Mansfield et al. (1989)	The health behaviours of rural women: Comparisons with an urban sample	N = 300	No differences in terms of % of regular exercises – 49% of rural and of urban	-
Johnson et al. (1995)	Urban-Rural differences in the health-promoting behaviours of Albertans	N = 853	No differences in frequency of exercise	-

Though most studies examining physical activity reported urban-rural differences, other studies have failed to find any differences in the physical activity patterns of rural and urban people. When examining differences in older adults' activity over a two week period, Morgan et al. (2000) found no real differences between those who lived in rural versus urban areas. Similarly, Mansfield et al. (1989) found no difference in the amount of regular exercise reported by urban and rural adult women and Johnson et al. (1995) failed to find a difference in exercise frequency between urban and rural adults. Among school children, Sjolie and Thuen (2002), Felton et al. (2002) and McMurray et al. (1999) have found no differences in the physical activity participation of those from rural and urban areas.

Summary

This section of the literature review presents findings from studies that have measured health and/or physical activity participation among rural and urban participants. Overall, these findings are inconclusive. With regards to health status and physical activity, some studies have reported a "rural advantage," while others have reported a rural "disadvantage." Other studies, however, have reported little or no difference in health status, or levels of physical activity between rural and urban participants. Therefore, it is presently unclear whether the health and physical activity levels of participants in rural areas are significantly different than those living in urban areas.

The discrepancy between particular definitions or constructs may help explain the inconclusiveness of these study's findings. First, studies often operationalize "urban" and "rural" differently. Comparisons of findings across studies are difficult unless studies use these two terms similarly. Other terms such as "health," or "exercise" have also been

operationalized differently in a number of studies. Comparisons of findings in these cases are also difficult given that "health" has been measured in a variety of different ways, and given that the measurement of exercise varies across studies. Such inconsistencies are a challenge to making meaningful comparisons between studies.

Although there has been a recent shift towards understanding the concerns of rural older adults within health research, the bulk of this work to date has concentrated on access to health care, and the challenges presented by the isolation and remoteness of particular areas (Statistics Canada, 1998). The importance of this work notwithstanding, much work remains to be done, especially within the domain of physical activity research. A review of this body of literature also reveals an emphasis on objective measures of health and well-being, with little research attention focused on the actual experiences of community members, including their perceptions and beliefs regarding their health or health behaviours. A deeper understanding of these issues will help inform future health promotion initiatives.

Older Adult Physical Activity

The benefits of regular physical activity have been extensively documented. Regular physical activity reduces the risk of heart disease, diabetes, stroke, osteoporosis and all-cause mortality (Centers for Disease Control and Prevention, 2002; Health Canada 1999a; U.S. Department of Health and Human Services, 1996). Older adults, as well as the young, benefit substantially from adopting a physically active lifestyle at any age, regardless of previous physical activity history (Martel, Bélanger, Berthelot & Carrière, 2005; Sherwood & Jeffery, 2000). Those who are regularly physically active

can cut age declines in half, given that 50% of all frailty experienced by older adults can be prevented through physical activity (O'Brien Cousins, 1998).

Specifically, participation in resistance exercise has received support as being beneficial to the health of older adults. Studies conducted on the effects of resistance training have documented the development of increased muscle mass among older adult participants (Fiatarone et al., 1994; Foldvari et al., 2000; Roubenoff & Hughes, 2000). Aerobic exercise has also received support as an important contributor to health in late life. Several studies have reported enhanced cardiovascular functioning among older adult participants by participating in regular aerobic activity (Boileau et al., 1999; Green & Crouse, 1995; Swoap, Norvell, Graves & Pollock, 1994).

Although the benefits of leading a physically active lifestyle are well known to Canadians, the majority of the older adult population are not regularly engaged in moderate physical activity. Currently, only 17.2% of older adults are regularly physically active (Cameron, Craig & Paolin, 2004). Similarly, two-thirds of American older adults do not exercise regularly (Centers for Disease Control and Prevention, 2002) while only 16% of adults aged 65-74 participate in 30 minutes of physical activity five or more days per week (U.S. Department of Health and Human Services, 2000). Current sedentary rates among older adults increase the risks of physiological and structural system impairments; namely, age-associated disease (Rejeski, Brawley & Haskell, 2003). Older adult Canadians are much more likely than younger Canadians to suffer from chronic illnesses (Statistics Canada, 1999).

Despite the bleak picture of older adult participation in regular physical activity, it is hasty to conclude that older adults are completely sedentary. Cameron, Craig, Russell

and Beaulieu (2000) report that 63% of older adults Canadians aged 65 and older enjoy walking, while more than one-third enjoy gardening. Home exercise is practiced by 20% of older adult Canadians 65 and over, while less than 10% of this cohort swims, bikes, or dances (Cameron et al., 2000). Given the rates of inactivity above, it may seem unusual that almost two-thirds of older adult Canadians enjoy walking. It may be more accurate to conclude that older adult Canadians are not particularly inactive. That is, they are engaged in a number of activities, but are for the most part not regularly involved in moderate physical activity (Spence, 2001). A recent study by Strain, Grabusic, Searle and Dunn (2002) confirms that exercise programs and sport activity are the least common activities participated in among older adults, while participation in walking and outdoor yard work declines with age.

Barriers to Physical Activity

Data from longitudinal studies have demonstrated it is much less likely for older adults to begin or sustain moderate physical activity compared to young adults (Chen & Millar, 2000). Given relatively low rates of regular participation in moderate physical activity, a major challenge for current research has been to understand what factors may predict physical activity participation, in hopes to improve rates of physical activity among older adults.

Prior research has demonstrated that low levels of physical activity participation among older adults may be due to biological, social and psychological barriers to physical activity with self-referent beliefs being an understudied concern (O'Brien Cousins, 1996). People who feel they have insufficient time to be physically active, or feel like they are too tired to be physically active are significantly less likely to

participate in physical activity (Lian, Gan, Pin, Wee & Ye, 1999; O'Brien Cousins, 2000). In addition to feeling too tired, Alexandris, Barkoukis, Tsorbatzoudis and Grouios (2003) have reported that a lack of confidence in one's skills to be physically active, a fear of getting hurt while being physically active, as well as a perceived lack of physical fitness are the most important barriers for physical activity participation among older adult participants. Finally, significantly more physically inactive older adults have been reported to cite poor health as a barrier to being more physically active, compared to older adults who are presently physically active (Booth, Bauman & Owen, 2002).

O'Brien Cousins (2003) studied beliefs in the form of self-talk about physical activity and suggested that it is not the perception of barriers per se, but how an individual deals with each barrier that is most important. O'Brien Cousins (2003) reported that all older adults perceived barriers to being physically active, but the physically active older adults tended to be those who were able to counter each barrier with beliefs about benefits towards the activity (often related to social support or personal capability). Sedentary older adults tended to be those who were unable to balance their array of negative expectancies of being physically active with an equivalent array of positive expectancies. The findings of a study by Juarbe, Turok and Pérez-Stable (2002) lend support to O'Brien Cousins' (2003) research. Despite perceiving a number of benefits to being physically active, the majority of older Latina women interviewed were physically inactive; indicative of the inability to overcome competing, multiple barriers to physical activity, namely a lack of determination and family/spousal support (Juarbe, Turok & Pérez-Stable, 2002).

Other studies have documented the importance of physical activity beliefs on the physical activity participation of older adults. Vertinsky (1995) suggests that beliefs held by older women regarding the potential risks of vigorous exercise may prevent many older women from initiating physical activity. Similarly, O'Brien Cousins (2000) reported that many older women believed even very mild physical activity (i.e., stretching) would be very risky, and worried that their hearts wouldn't be able to withstand such activity. Participants voiced similar concerns when asked about going for a walk or performing a curl-up. A number of individuals claimed going for a walk would leave them breathless and performing a curl-up would likely injure their neck or back.

Hardcastle and Taylor (2001) have argued that these negative beliefs are more broadly reflective of norms around age-appropriate activity, and ageist stereotypes. Both O'Brien Cousins (2005) and Hardcastle and Taylor (2001) have argued that our ageist society perpetuates the stereotype of the frail older adult; seen as an individual who is incapable of strenuous exertion, and who risks great harm in attempting to be vigorously physically active. Given society's norms regarding age-appropriate behaviour, and the negative stereotypes associated with aging and physical activity, current rates of physical inactivity are not surprising (Hardcastle & Taylor, 2001; O'Brien Cousins, 2005). Ory, Hoffman, Hawkins, Sanner & Mockenhaupt (2003) speculated that the scarcity of interventions to promote health in later life are due to the traditionally held beliefs that it would be too late to help individuals who were older than 65, and that the promotion of regular physical activity would be too strenuous for older adults to tolerate.

Summary

The benefits of regular physical activity are numerous and are well documented. Despite this, however, the majority of older adults do not regularly participate in moderate physical activity. Barriers to physical activity have been reported to be one factor contributing to inactivity among older adults. Barriers may take many forms, and include ageist beliefs held by an individual about themselves, as well as more global views on aging and age-appropriate activity perpetuated by society.

Current Physical Activity and Leisure Theory

Given relatively low physical activity participation rates, a major goal of physical activity research has been to increase the understanding of factors that influence people's motivation or likelihood to exercise, so that effective interventions can be designed (Dishman & Sallis, 1994). To help achieve this goal, numerous studies have taken a quantitative research approach, and have focused on identifying the modifiable determinants of physical activity behaviour (Humpel, Owen & Leslie, 2002). Several determinants have been found to contribute to the understanding of physical activity behaviour and have been conceptualized within several prominent health behaviour theories or models (Glanz, Lewis & Rimer, 2002). To provide the reader with some context from within this line of research, a brief review of studies that are pertinent to the discussion of older adult physical activity participation is presented.

Although the constructs within some behavioural theories, such as the Theory of Planned Behaviour, have received relatively weak support in adult populations (Hagger, Chatzisarantis & Biddle, 2002; Trost, Owen, Bauman, Sallis & Brown, 2002) other behavioural theories and theoretical frameworks that have been applied to physical

activity behaviour have proven to be more promising. One such theory that has received a considerable amount of research support is Social Cognitive Theory (SCT) (Bandura, 1977; 1986).

Physical Activity Theory

Social Cognitive Theory. In SCT, human behaviour is viewed in terms of a triadic reciprocality in which behavioural, cognitive, and other personal factors and environmental events all operate as interacting determinants of each other (Bandura, 1986). According to SCT, all behavioural changes are mediated by a common cognitive mechanism, namely self-efficacy expectation (SE). SE is the confidence a person feels about performing a particular activity (Bandura, 1977; 1986). Another mechanism proposed by Bandura (1977) is outcome expectancy (OE); defined as a person's estimate that a given behaviour will lead to a certain outcome (Bandura, 1977). According to SCT, a person is most likely to perform a particular behaviour when he/she feels confident they are able to perform a given task, and at the same time associates carrying out the task with positive outcomes.

Self-efficacy (SE) has been reported to predict participation in physical activity. In fact, physical activity SE is the most consistent correlate of physical activity behaviour among older adults (Sherwood & Jeffery, 2000; Trost et al., 2002). Physical activity SE is strongly related to physical activity participation in older adults (Booth et al., 2000; Conn, 1998; Conn, Burks, Pomeroy, Ulbrich & Cochran, 2003; McAuley, 1993; McAuley & Blissmer, 2000; O'Brien Cousins, 1996, 1997; Wilcox, Bopp, Oberrecht, Kammermann & McElmurray, 2003), and has been shown to be a significant predictor of physical activity participation among older adult exercisers (Rodgers & Brawley, 1996).

Those who are highly confident in their ability to be active are found to be significantly more physically active than those with lower levels of self-efficacy (Booth et al., 2000; Oman & King, 1998).

Outcome expectations/expectancies (OE) or beliefs about the benefits of being physically active have also been reported to be significant predictors of physical activity behaviour in older adults (Bagozzi & Edwards, 2000; Burton, Shapiro & German, 1999; Conn, 1998; Conn et al., 2003; Hallam & Petosa, 1998; Sharpe & Connell, 1992). Older adults who believe being physically active will benefit their health have been found to be more active than those who do not believe this to be the case.

In addition to SE and OE, social support has also been conceptualized within a SCT framework, and has been applied to the study of older adult physical activity. O'Brien Cousins (1995, 1996) reported that social support for older women was at least as strong a predictor of late life exercise as self-efficacy. Supportive family members, friends, physicians and significant others were all reported to be significant predictors of exercise participation among elderly women.

As a construct studied outside of SCT, social support has also been identified as a significant predictor of the intention of becoming more physically active. Schuster, Petosa and Petosa (1995) have reported social support to be predictive of retired adults' exercise intentions. Similarly, Wankel, Mummery, Stephens and Craig (1994) reported that social support from spouses, family members, friends, and doctors was a stronger predictor of the intention of becoming physically active among older adults, compared to younger adults.

Ecological Approaches. Although the social cognitive determinants reviewed above have been found to be useful in terms of predicting physical activity participation, physical activity promotion interventions guided by individual approaches (i.e., SE) have demonstrated limited success in promoting long term maintenance (Marcus & Forsyth, 1999). Although SCT incorporates external influences (i.e., barriers) of behaviour in addition to individual influences within its framework, Bandura's theory (1996) has not discussed how external influences on behaviour (such as the built environment) can exert unmediated effects on behaviour. Over the past several years, increasing research attention has been focused on alternative approaches to understanding physical activity behaviour; namely those that consider the direct influences of social and environmental factors in addition to individual influences (Sallis, Bauman & Pratt, 1998; Sallis & Owen, 2002; Spence & Lee, 2003).

Research that has adopted an ecological approach to the study of physical activity participation has begun to identify determinants of physical activity behaviour. One factor that has been identified as predictive of older adult physical activity participation has been the accessibility of recreational facilities (Booth et al., 2000) although on the whole, most of the research conducted in this area to date has focused on younger adults (Sallis, 2003). These studies have demonstrated the physical environment's affect on physical activity participation.

The easy accessibility of recreational facilities (Ball, Bauman, Leslie & Owen, 2001) as well as an overall lack of access to such facilities (Sallis et al., 1989; Sternfeld, Ainsworth & Quesenberry, 1999) have been reported to be important determinants of physical activity in adults. Urban adults in particular have been found to be more

physically active than their suburban counterparts; a difference that has been attributed to differences in walkability in these areas. In a study by Frank, Schmid, Sallis, Chapman and Saelens (2005) those who lived in neighbourhoods with nearby shops and services were found to be 2.4 times more likely than suburbanites to meet government recommendations for physical activity. Similarly in Canada, city-dwellers are reported to be twice as likely to walk or bike to work, or to complete daily chores compared to non-urban citizens (Heart and Stroke Foundation of Canada, 2005). Those who live in areas that are more conducive to walking are more physically active than those who live in more walking-restrictive areas.

The promise of environmental determinants to explain physical activity behaviour, over and above individual (cognitive) explanations, has prompted the proposal of theoretical frameworks to help understand the nature of such variables. One such theoretical framework is the Ecological Model of Physical Activity (EMPA) proposed by Spence and Lee (2003). The EMPA provides a conceptual framework from which to examine multiple influences of physical activity, and depicts physical activity behaviour as being influenced by the interplay between environmental settings, biological and psychological factors. Testable hypotheses consistent with the EMPA include, a) The influence of more distal processes on physical activity should be buffered by proximal factors, b) the environment exerts a direct effect on physical activity, c) psychological factors mediate most of the relationship between extra-individual factors and physical activity, d) biological and genetic factors influence physical activity participation, and the influence of biological and genetic factors on physical activity are moderated by extra-individual factors such as physical ecology. Further research that tests one or more of the

above hypotheses is required to determine the usefulness of this framework to explain and predict physical activity, and to clarify the relationship between individual and environmental influences on physical activity (Spence & Lee, 2003). To date, this framework has not been used to examine the physical activity participation of older adults.

Summary

A wealth of research that has been conducted from within the physical activity domain has attempted to identify determinants of physical activity behaviour. Two theoretical perspectives from which studies have been conducted include SCT and ecological frameworks. Some studies have shown that intra-individual traits, such as self-efficacy are most important in terms of predicting physical activity behaviour. It has also been argued that environments may exert direct influence on physical activity behaviour, over and above intra-individual influences. Recently, Spence and Lee (2003) have proposed an ecological framework from which to carry out future physical activity research, that has not yet been applied to the study of physical activity behaviour of older adults Both SCT and ecological approaches have received support when applied to an understanding and prediction of physical activity behaviour, but it remains less clear how people's lived experience or perceptions of being physically active may affect popular theoretical understanding.

Leisure Activity Theory

A wealth of research has been conducted on the leisure-time physical activity participation of individuals. Researchers have also conducted extensive research that is more broadly focused on other leisure-time activities. Termed "leisure research," this

area is concerned with the study of activities, as well as attitudes towards time and non-work activities (Burdge, 1989). A number of studies from within the leisure field have examined the relationship between aging and leisure activity, and have reported on the nature of leisure activity among older adults. Understanding leisure activity participation among older adults is particularly relevant given that adults are spending more of their years in retirement. Such inquiry is significant, given its potential to improve the quality of life of older adults (Love, 1994).

Studies that have examined the leisure activity participation of older adults have at times explored this participation from within a life course framework. This perspective recognizes that humans actively engage with and shape, as well as respond to, their environment (Freysinger, 1999). Development is seen as a life long process from conception to death (Elder & Johnson, 2002) shaped by the interaction of the biological and psychological individual with his or her social and cultural environment across time. The experience of later life, then, can only be understood in terms of what has gone before (McCormick & McGuire, 2004). As McPherson (1991) has reminded us, aging is a lifelong process; being old does not begin at 65.

Iso-Ahola (1980) argues that play in childhood lays the foundations for leisure and recreation behaviour in one's late life. Being exposed to optimally arousing and incongruous play environments, as well as having a large variety of play experiences are important in childhood (Iso-Ahola, 1980). An individual's play experiences are thought to affect leisure in adulthood, such that if an individual has limited opportunities for play in childhood, flexibility in adult leisure pursuits will likely be impaired (Iso-Ahola, 1980). Active play in childhood, however, likely translates to active leisure in adulthood

while inactivity in childhood warns of inactivity in adulthood (Iso-Ahola, 1980). Acquiring favourable attitudes toward leisure during these formative years lays the foundations for satisfactory socialization in older adulthood (Iso-Ahola, 1980). Iso-Ahola (1980) speculated on the appreciation of leisure in late life and has written, "If in adolescence or early adult years the Protestant work ethic becomes the determining principle, an individual may not be able to appreciate the value of leisure in later life" (p.163). This underlines the importance of early, childhood leisure experiences on leisure participation in later life.

In terms of the nature of leisure participation in older adults, more continuity than change has been seen in the types of activities in which people participate in over the life course, with continuity increasing with age (Freysinger, 1999). Over the life course, there also has appeared to be a significant increase in the number of people who participate in, or start hobbies and home-based activities (Iso-Ahola, Jackson & Dunn, 1994). Research has also suggested that there is a "core" and "balance" in leisure activities across the life course (Kelly, Steinkamp & Kelly, 1986); participation in some activities will remain stable, while other activities may be dropped and replaced with others (Iso-Ahola et al., 1994). Kelly et al. (1986) have maintained that participation in core activities will remain stable because they are relatively inexpensive, convenient, and are enjoyable, while other activities may be dropped in favour of others due to life commitments, changing abilities, norms, and interests.

Summary

Numerous studies have demonstrated the relationship between childhood leisure experiences and leisure participation in later life. Studies have reported that early

childhood leisure experiences affects leisure behaviour in later life. Given the relative continuity of leisure across the life course, those who have had positive and diverse leisure experiences in their earlier years will likely be active leisure participants in old age as well. Those who have not developed positive leisure associations, however, likely will not be active in their older adult years.

A review of the literature pertaining to a) urban and rural differences in subjective health and physical activity participation, b) older adult physical activity participation, c) physical activity theory, and d) leisure activity theory has been presented. Although inconsistencies within particular bodies of literature and knowledge gaps remain, the findings reviewed have contributed to the current state of knowledge within each respective area. Given that the majority of studies have taken a traditional "quantitative research" approach, however, alternative research approaches may help inform current knowledge in these bodies of research.

Currently, relatively little is known about people's perceptions and beliefs of health, about what people are thinking about their health, and about the impact these perceptions and beliefs may have on the understanding of health behaviour practices. This is especially true for "underrepresented populations" including older adults and those who live outside urban areas. More specifically, little is currently known about the perceptions and beliefs older adults hold towards physical activity in Canada. An investigation into the past experiences of older adults and on how these experiences have shaped their perceptions and beliefs may have implications for future research.

CHAPTER 3. METHOD

Why Qualitative Research?

Rather than choosing a method and matching it to a research question, the research question should drive the selection of the method (Patton, 2002). The purpose of this study was to explore the nature of physical activity participation and perceptions of being physically active among older adults in rural Newfoundland communities. More specifically, the research questions were:

a) How have participants experienced physical activity during their lives?

b) What are the perceptions and beliefs that older adults living in rural Newfoundland hold towards physical activity?

Since it was necessary to develop a better understanding of the experiences, perceptions, and beliefs participants associated with physical activity, a qualitative method was selected. In general, qualitative approaches enable researchers to capture participants' subjective experiences through the use of data collection methods such as interviewing and observation (Denzin & Lincoln, 1998). Denzin and Lincoln also argued that qualitative research recognizes the importance of the research participants' unique perceptions and beliefs. Qualitative research is interpretive and grounded in the lived experiences of people. It is particularly useful when researchers seek to learn more about the particular meanings participants attribute to their experiences (Marshall & Rossman, 1999). As such, a qualitative approach was an ideal method for providing data in response to the research questions.

In terms of gerontology research, Kuckelman, Coob, and Forbes (2002) suggested that qualitative research approaches are particularly appropriate when the topic under

investigation is not well understood. As previously discussed, little is known about the physical activity experiences of rural older adults and how these experiences may affect their physical activity perceptions and beliefs. Therefore, this study can make a unique contribution to the literature.

Qualitative research is in fact an "umbrella term" for a variety of philosophical orientations to interpretive research (Glesne & Peshkin, 1992, p.9). Qualitative research has been defined in a number of ways. Creswell (1998, p. 15) defines qualitative research as,

> An inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex, holistic picture, analyzes words, reports detailed views of informants, and conducts the study in a natural setting.

Similarly, for Marshall and Rossman (1999, p.2) qualitative research is "a broad approach to the study of social phenomena; its various genres are naturalistic and interpretive..." Finally, Denzin and Lincoln (1998, p.3) define qualitative research as, "...involving an interpretive, naturalistic approach to its subject matter...which attempt[s] to makes sense of, or interpret, phenomena in terms of the meanings people bring to them..."

Participants

Data were obtained from five female and five male participants. The mean age of participants was 82 years, with a range of 70-94 years. Nine out of ten participants were Protestant (either Anglican or United) and one participant was Roman Catholic. Each participant completed one in-depth individual interview, and five participants were asked

to complete an additional member-checking interview, for a total of 15 interviews. Table 4 presents demographic information about each participant.

Table 4

Research Participant Information[*]

Participant	Age	Gender	Marital Status	No. of years married	No. of years living without spouse	Occupation before retirement
Madge	85	F	Widow	54	9	Homemaker
Pamela	70	F	Widow	33	11	Homemaker
Olive	79	F	Married[a]	60	N/A	Storekeeper/Homemaker
Laura	94	F	Widow	28 + 25[b]	21	Storekeeper/Homemaker
Darlene	82	F	Widow	44 + 2[b]	5	Homemaker
James	78	M	Married	56	N/A	Fisherman
Nick	73	M	Married	45	N/A	Utility man (Electricity)
Alex	91	M	Widower	60	2 years	School board Member
Arnold	86	M	Married[a]	60	N/A	Fisherman/Storekeeper
Andy	78	M	Widower	47	1	Fisherman

[*]Pseudonyms have been used to protect the identity of participants
[a]Participants married to each other; [b]Participant married twice

Site Selection

Fogo Island (see Appendix A), a relatively small island off the North East coast of the island of Newfoundland, was chosen as my data collection site. This was due to both practical considerations, as well as my personal interest in the area. Specifically, this area was chosen: (a) because the communities on the island were typical Newfoundland outports (rural in nature, and populated by a large proportion of older adults) and (b) because of the presence of family members living in the area who could be called upon to aid in establishing rapport, and participant recruitment. All communities on Fogo Island

satisfied the criteria outlined in each "rural" definition provided earlier (du Plessis et al., 2002).

Sampling and Participant Recruitment Strategy

A purposeful sampling model (Patton, 2002) was used to recruit individuals who represented the processes of interest, rather than selecting participants based on representativeness (Denzin & Lincoln, 2000). Although they could be drawn from any of nine proximal communities, participants were required to: a) be at least 65 years of age, b) have been born and raised in communities on Fogo Island, Newfoundland (c) have resided there for most or all of their lifetime, and (d) currently reside in a community on Fogo Island. A key informant (personal relative of the author) was asked to identify individuals in the surrounding communities who would satisfy the above criteria and provide information-rich data (Patton, 2002).

Once a list of potential participants was generated, and contact information had been collected, initial recruitment began. To begin recruiting participants into the study, chain referral (Coleman, 1958), or snowball sampling, was used. Individuals from the list were either contacted by telephone, or were visited in person. In both cases, participants were given a brief explanation of the purpose of the study and were made aware of the approximate time commitment required. If a person indicated they were interested in participating, a convenient interview time was scheduled.

Before beginning each interview, participants were given an information letter (see Appendix B) that outlined what the study was about, and were asked to sign a consent form (see Appendix C). If an individual was not interested in participating, they were thanked for their time, and recruitment began again by contacting another individual

from the list. Initially, six participants volunteered to participate in the study. Once these initial six interviews had been completed, another four participants were recruited into the study.

After completing an interview, participants were asked if they might know other community members who might provide information-rich data, and who would be interested in being interviewed. If so, these potential participants were also contacted either by telephone or home visit. When no new names were provided, or if a potential participant refused, the original list generated by the key informant was used to recruit additional people into the study.

Procedure

Data Collection

Data collection focused on saturating emerging themes or categories, working towards a point where, "…no new properties, dimensions, conditions, actions/interactions, or consequences [are] seen in the data" (Strauss & Corbin, 1998, p.136). In the summer of 2004, over two periods of approximately four weeks each, 10 semi-structured interviews were conducted at the residence of each participant. Six in-depth interviews were completed during the initial four week-period, and an additional four in-depth interviews were completed during the second four-week period. Five member-checking interviews were also conducted during the second four-week period. Out of a total of 11 persons who were approached about participating in the study, one person refused. This person didn't feel comfortable being interviewed.

Conducting semi-structured interviews provided an overall structure to each interview (as each participant was asked the same main questions, in the same order) but

also provided freedom to follow leads as they emerged, during each interview. As is typical with this type of interview strategy, a semi-structured interview guide (Kvale, 1996) was created to guide each interview. This guide contained a series of questions, follow-up questions, and probes prepared beforehand. As it became necessary to probe further into relevant issues discussed by participants, and as new opinions and ideas were expressed, additional questions and probes were added to the original interview guide. Appendix D presents the final interview guide. Initial interviews varied in length from 45–90 minutes. All interviews were audiotaped, with the participant's permission, and later transcribed verbatim (all speech events were written as they were spoken to preserve the nuances of this particular Newfoundland dialect whenever possible).

Data Analysis

One qualitative methodology that has outlined particular strategies for the analysis of data is Grounded Theory (Glaser & Strauss, 1967). Although the end product of this study is not a grounded theory of physical activity participation among older adults in rural Newfoundland, the tenets of grounded theory analysis were used to provide a conceptual ordering of the data (i.e., the data were organized into discrete categories according to their properties and dimensions) (Strauss & Corbin, 1998). This "early analysis" is a precursor to theorizing (Strauss & Corbin, 1998). Although the researcher is cautioned against using them in a rigid, recipe-like manner, these procedures help the researcher begin to make sense of the data collected (Strauss & Corbin, 1998).

Analysis is an ongoing process in the methodology of grounded theory, and begins early, with coding procedures (Strauss & Corbin, 1998). Through coding, researchers interact with their data allowing new insights to surface. Strategies for further

data collection are also brought into focus (Charmaz, 2000). Strauss and Corbin (1990; 1998) recommend conducting a number of coding procedures in order to make sense and organize data that have been collected, including microanalysis (line-by-line analysis) open coding, and axial coding (Strauss & Corbin, 1998).

Microanalysis. Upon transcribing each interview, microanalysis began. This involved conducting a detailed line-by-line analysis on each interview transcript whereby initial categories were generated from the data obtained. Through interaction with the data, sentences were categorized into meaning units.

It is important to note that although single sentences were often identified as meaning units, multiple sentences were also categorized as one meaning unit when these sentences were deemed to convey a similar idea or theme. Once a meaning unit was identified, it was labelled with a code to describe it. For example, the following excerpt was coded as "active leisure":

> *Well:..we used to play football. Football on the harbour. And we used to play Cricket. What you used to call Cricket. That's sort of baseball isn't it? Some of 'em called it rounders, some of 'em...we used to call it Cricket. We used to play that. And, 'corse goin to school, you'd play the piddly.*

To help clarify whether meaning units were similar enough to be labelled with the same code, each code was written on cue cards that also contained a "rule of inclusion" (Maykut & Morehouse, 1994) describing its meaning. Meaning units conveying similar meanings were labelled with the same code. For instance, the following excerpt was also coded as "active leisure":

...Ah, I'm still goin' berry-pickin. I'm gonna pick berries for as long... [laughter] as I got strength to do it [laughter]. I got to get my Marsh berries the fall. We got to walk a long ways to get them, but I'll have them.

This early analysis procedure (Strauss & Corbin, 1998) aided in the organization and understanding of the main messages conveyed by participants on particular issues. The development of these smaller categories, or meaning units, was a way to break the data into meaningful units that were much easier to work with. The main ideas expressed in each interview became clearer, and conducting comparisons between interviews became much more manageable.

Open Coding. As line-by-line analyses were completed, and meaning units had been coded, the analysis began to draw more heavily on open coding techniques (Strauss & Corbin, 1998). Performing open coding techniques initiated the identification of relationships among data categories, and helped create familiarity with the data's specifics. This familiarity fostered "active organization/reorganization" of data. By breaking the data apart and reconstructing them, interpretive schemes began to form.

The constant comparative method (Glaser & Strauss, 1967) was used to help identify relationships among meaning units both within and between transcripts. For instance, in the above examples it was necessary to distinguish between past leisure activity and present leisure activity. In addition, a distinction was made between structured activity (i.e., sport activity) and unstructured activity such as berry picking.

As explained above, the goal of this technique was to evaluate and refine existing codes, and organize/reorganize them as necessary (Strauss & Corbin, 1998). Upon closer analysis, certain meaning units that were originally labelled with the same code appeared

to illustrate different ideas. In these cases, an additional code was created to better reflect these differences. Constant comparisons also helped to establish that the majority of the original meaning units that were labelled with the same code were similar to one another, in terms of the meaning conveyed. The end result of carrying out open coding was the generation of a list of all the codes that had been identified in all transcripts.

Axial Coding. Once the data had been repeatedly organized and reorganized through open coding and a list of codes had been generated, axial coding was used to begin reassembling the data (Strauss & Corbin, 1998). This analysis technique focused on identifying key categories, on exploring the conditions that influence the categories in question and on specifying the conditions that influence these categories (Creswell, 1998; Strauss & Corbin, 1998).

To begin, the list of codes along with the quotes associated with them were compared with one another to begin narrowing categories. This ensured that only those codes thought to represent major overarching themes remained (i.e., categories representative of ideas repeatedly expressed by participants). Through the axial coding process, the number of categories or themes generated during open coding was reduced. As a result of this procedure, a series of electronic documents that helped clarify the nature of categories and themes was created. The first line of each document was a title that was representative of a particular over-arching theme (e.g. the code, which was written at the top of each document). Beneath each title were quotes (meaning units) from each interview transcription that reflected each theme.

Throughout the axial coding process, with the aid of diagrams, additional comparisons (Strauss & Corbin, 1998) were made to examine possible relationships

between meaning units. For the present analysis it was important to consider relationships between categories. Therefore, conceptual diagrams were constructed to help tease apart how particular categories/concepts fit together within a broader framework. Diagramming helped illustrate possible relationships between the main categories identified, and helped to conceptualize how categories might fit together in a broader conceptual framework.

Validity

Strauss and Corbin (1998) have argued that results should be reproducible, in the sense that given the same theoretical perspective, given similar general rules for data gathering/analysis and assuming similar conditions, research done by others should produce theoretical explanations similar to those from the original study. Similarly, Lincoln and Guba (2000, p.180) in discussing qualitative research, have written about validity, but introduce "defensible reasoning" as opposed to a more positivistic methodological rigor. They have written, "Are we interpretively rigorous?" (p.179), and viewed the central question embedded in validity to be, "How do we know when we have specific social inquiries that are faithful enough to some human construction that we may feel safe in acting on them…?" (p.180). In order to establish the validity of this study, five member-checking interviews (lasting between 15-25 minutes) were completed to assess saturation among categories/themes.

Member Checking

Over the course of conducting 10 in-depth interviews, it became apparent that certain participants provided more information-rich data than others. In particular, five participants stood out as providing particularly insightful and valuable data. For this

reason, and with their permission, a member-checking interview was conducted with each of these five participants to assess the level of agreement between researcher and participant. Each member-checking interview was recorded and transcribed in the same manner as initial interviews. The data obtained were included in the overall analysis and are recorded throughout the results section.

The purpose of each member-checking interview was to determine if particular interpretations made during analysis (based on prior statements made by the participants) were fair and accurate, as well as to obtain further elaboration on emerging meaning units or categories (Lincoln & Guba, 1985). When asked, participants agreed that the interpretations of the data they had provided were fair and accurate. Additional data provided during member checking corresponded to the main categories identified during original data analysis.

Reflexivity

Rejecting positivism, qualitative researchers have been encouraged to embrace their subjectivity and use it as an analytic tool (Glesne & Peshkin, 1992). To this end, I would like to acknowledge my position in my current research. I have conducted research in an area that has a distinct geography and culture of which I am very familiar. This has likely yielded experiences that would be different than if an outsider had carried out my research. I believe my familiarity with this region's culture, and dialect in particular, however, has strengthened the rigor of my analysis. Researchers who are unfamiliar with this area would likely be hard pressed to capture and understand particular nuances of the dialect spoken in this area. Consequently, since I am fluent in this regional dialect, I believe my analysis and subsequent interpretations to be more reflective of the thoughts

expressed by participants, than if carried out by an "outsider." In addition, my familiarity has likely contributed to an unusually high response rate, and extraordinarily successful participant recruitment. Outsiders would likely have more difficulty finding potential participants and would likely encounter more refusals.

Although I was not directly known by any participants, my family connections to the island may have influenced participants to develop trust more readily than if my research had been conducted by an outsider. Outsiders without a family connection would likely have had more difficulty establishing rapport, and consequently obtaining the same "richness" to their data, as compared to my own. However, it is also possible that participants may have been more inclined to hide the real truth, or tell me what they thought I wanted to hear, as compared to an outsider. Either way, the experiences of another researcher would likely have been different than those of my own.

Throughout the research process I have monitored my own subjectivity. In the field, I kept a reflexive journal in which I entered my thoughts related to data collection; specifically my interpretations of data obtained (Patton, 2002). In addition, I have met with members of my thesis committee, who have played "devil's advocate" with me, when I have discussed my findings with them (Holt & Sparkes, 2001). Finally, I have presented various aspects of my data collection and findings to faculty members and my peers, as well as to academic audiences at academic conferences. Doing so has kept me acutely aware of how my place in the research has affected my data collection and affected my interpretations of these data.

CHAPTER 4. RESULTS

The results of this study are presented in three main sections. The first section presents the historical context of physical activity and describes the physical activity participation patterns of participants in youth and adulthood. The data in this section address the first research question, "How have participants experienced physical activity during their lives?" The second section presents data related to current leisure-time activity participation (which addresses the first research question) as well as perceptions of current leisure-time physical activity participation, which addresses the second research question, "What are the perceptions and beliefs that older adults living in rural Newfoundland have towards physical activity?" The third section presents data related to participants' strategies for a successful old age, describing the current activities that older adults occupy their time with at the present time. The data in this section also addresses the first research question, and helps describe the nature of participants' current activities.

To develop a fuller understanding of current physical activity participation, it is necessary to examine the broader historical context in which participants came of age, as well as their motivations for, and beliefs about being physically active. Results are reflective of the nature of participants' physical activity participation over the life course, specifically, physical activity participation from youth, through adulthood, and into older adulthood. The historical context in which participants have lived has bearing on the interpretations of current physical activity participation.

Historical Context of Physical Activity

For participants, physical activity throughout their youth and adult years was mainly performed within a work activity context, and usually meant performing physical

labour. Most physical activity was carried out in order to complete a work task, as opposed to being performed within a recreational context. The time of year was particularly relevant to work activity, as the seasonal cycle of work activity greatly affected participants' work/physical activity patterns.

Work Activity During Youth

Work activity represents any physical activity performed by participants as part of their occupational duties. Such occupational activities usually involved physical labour. This was true for the head of the household (the husband/father) but also true for the rest of the family (e.g., the wife and children) who were involved in supporting the activities related to the husband's/father's occupation. Most work activity involved performing tasks related to the inshore cod fishery; tasks that were essential to the family unit's survival. Men were almost exclusively employed as fisherman, and depended on the rest of the family to help "pitch in" and provide support, mostly in the form of physical labour.

Referring to the work undertaken in his youth, Arnold said, "Cause…when we were big enough…when I was seven or eight year old…I had to work like, like a man!" Alex recalled having to help his grandfather and father at a slightly older age (around 13 years of age) and by age 17 or 18, "we had our own boat here, myself and my cousin." Arnold began to assist his uncle with fishing at nearly the same age (14 years). Finally, Laura remembered her father remarking that work would begin, "…almost as soon as they could walk one time." Her father found himself aboard the fishing punt[1] "as soon as he was big enough to see out over the gunnels…" A member-checking interview with

[1] Flat-bottomed shallow boat, broad and square at both ends (Story et al., 1990)

James confirmed the idea that when people, "…got old enough to work…[they] had to work." Similarly, in another member checking interview, Arnold confirmed that when a person was between eight to ten years of age, "we had to work then."

From May-June, until October-November, the majority of families on Fogo Island were heavily involved in the fishery. It was a family effort, as evidenced by Olive who said, "We had our chores to do…boys and girls…If Mom was in the stage[2] at the fish…we were expected to do some of the house work…" As was typical, all family members pitched in, fulfilling their individual responsibilities. In his youth, Alex remembered coming out of school in the summer, in the last week of June, and being involved in assisting his grandfather or father in any way he could, to help with the fishing duties, "…and that's when everything was going wild…you had to work…there was a lot of work."

Work activity during youth was not limited to fishing-related activities. Alex also pointed out that the house still had to be looked after. After all, "there was splits[3] to get, there was wood to get, there was coal to bring…water barrel had to be filled up. That had to be done when you come out of school…" In addition, it was common for teenage boys to leave for the lumberwoods[4] in the fall, to earn some extra money for their families once the fishing season had ended. During a member checking interview, Arnold put it this way, "When [young men] give up the fishery in the fall, they'd go in the lumberwoods…"Andy remembered going away to the lumberwoods when he was around

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[2] An elevated platform on the shore with working tables, sheds, etc, where fish are landed and processed for salting and drying, and fishing gear and supplies are stored A platform built on poles and spread with boughs for drying cod-fish on the foreshore (Story, Kirwin & Widdowson, 1990)
[3] A thin piece of wood, about 30-36 cm long, used chiefly as kindling (Story et al., 1990)
[4] Forest area for the commercial cutting of timber (Story et al., 1990)

16 years of age, while James also spent the fall in the lumberwoods remarking, "Yeah, as soon as you got up old enough, we had to go…try and do a bit of work."

The story of activity in youth was similar for female participants as well. Madge remembered doing chores at an early age, remarking, "well, I wasn't very old before I worked, you know…did housework…" and added that later in life she was responsible for "bring[ing] in wood, and doin fish (do it, and wash it, and put in on the flakes, and dry it)…that was our work." Madge also remembered being employed prior to marriage doing, "work on the wharf…yaffling[5] fish" before the age of 17. Olive, a former storekeeper and currently a married housewife, estimated that she began housework at eight or ten years of age, and also spent time in her youth "taking fish out of the boats." Finally, Laura remarked that when children were eight or 10 years old, they were "too old to be playing," and were expected to carry out work activities instead.

To summarize, males and females were responsible for a variety of work tasks at a relatively young age. These work activities were vital for the survival of the family. Males and females were involved in fishery-related tasks, and also undertook a number of other activities (i.e., chores) to assist the family in its day-to-day functioning. The time at which these participants grew up was a time where performing manual labour was the norm and a reality of life.

Activity Perceptions

The importance of appearing to be busy referred to norms around performing work and leisure activity. Participants perceived the communities in which they lived as having a very positive view towards performing work activity. Consequently, at least while under the gaze of other community members, participants ensured they appeared

[5] The action of gathering and stowing armloads of dried and salted cod-fish (Story et al., 1990)

busy. Even at a relatively young age, participants found themselves heavily involved in work activity and with little spare time, especially in the summer. When these work tasks had been completed, children were permitted to spend time in recreational activity. The prioritization of work activity over leisure activity was evident when Alex related an incident from his youth. Alex recalled, "I guarantee you we knew what work was" and reminded me that if someone wasn't working they were perceived as being "lazy." "You wouldn't supposed to be sick…[otherwise] you were [perceived to be] too lazy to work." Illustrating this point further, Alex went on to say:

> My father was a wonderful hand to work. And he used to play the accordion, see? My father was a real…always played the accordion…played to dances and everything...and we always had a cardeen. I learned how to play the cardeen…and one time, I 'spose, just before I was married I 'spose…not long before I was married…One morning, one Monday morning, we were waitin to go fishing…And it 'twas about 11 o'clock in the morning I 'spose, and blowin a storm off to the Nar'west. We couldn't get out fishin, we were waitin see…and I was out on the bridge[6], Monday morning it 'twas…I got the cordian…out on the bridge, playin the cordian. father come up, to get somethan to eat 11 o'clock. When he come round the carner of the house, I was on the bridge with the accordion. Do you know what he said? He said, 'put that away' he said people'll think you got nuddin a'tall ta do!' I never forgot it, I told the story a dozen times. And father loved the accordion. But you couldn't…I 'spose play outdoors then. In the evening now, or some time in the evening…Put that away he said, people'll think you got nuttin a'tall to do... But, that's the typical old timers…

[6] A small uncovered platform at the door of a house to which the steps lead (Story et al., 1990)

A story like this helps illustrate the importance placed in work activity, and its inherent value, especially during the period in which these participants grew up.

With regards to the family's perceptions of how one should spend their spare time, Andy also recalled feeling as though, "they'd be liable to check up on ya, and think you should be doing something *useful*…something to help…the parents." Darlene also felt as though her mother would feel as though Darlene's time was better spent, "in the house…doing something; knitting or sewing." Nick, married and retired from a non fishing-related occupation, remarked, "they'd [the parents would] think it was better if you were doing work…"

The sentiments of Alex and Arnold were similar to those above in that both felt as though completing work tasks was seen as the number one priority. However, Alex said that though his father,

> [Would not] say that you're wasting your time out there [participating in leisure activity]. I don't think. I think he would say, if he had something for me to do, 'Alex, come on in 'by, let's get this done.' That attitude, eh? If he…If there was…the water barrel wants to be filled up, and 'twas gettin late, and if I was kickin football he'd probably…sing out, 'Come on in b'y, and get that barrel filled up.' And I'd come on. That's how, that's how I think most, most of the people in them days. They didn't mind that…There was always so much to that thing too…a family affair. You had family chores to do, to the house…things had to be done before darkness set in…in the winter months…and, and, that's the ones had to do it, was the, was the children in the house. The girl had her work to

do, and…whatever it was…but they [parents] always had time for a little bit of sport in between.

Arnold also indicated that he thought completing work activities would be the first priority, and felt "they'd want you to be …doin something for the fishery, or the gardens, or something to eat…rhinin rails, or pickets, [for] the fence…" but also conceded that he thought participating in some play activity would be fine as long as, "it was after…in the evenings or something like that." During a member checking interview, Alex commented that, "you would never see anyone in the fall of the year [playing football] because boys were working…"

The views of these participants help illustrate the importance of appearing to be busy, and participants' perceptions of community attitudes towards work activity. Performing work activity was a matter of survival, and consequently was highly valued, and held priority over engaging in other types of activity; at least until all work activity had been completed. Therefore, participants appear to have had relatively little exposure to childhood leisure activity. In fact, Alex suggested that boys and girls, "didn't have time for that" during a member checking interview. Instead, young children spent most of their time "doing something useful" to assist the family in daily work tasks, Children were expected to contribute to everyday tasks of living (i.e., work activity) at a relatively early age.

Leisure Activity During Youth

Consistent with Iso-Ahola's (1976) definition and for the purposes of this study, leisure activity referred to any past activity perceived to be performed during participants' "leisure time." Leisure activity was usually performed for enjoyment, and

typically did not involve performing formal work activities. Although the categorizations of work activities and leisure activities are not entirely mutually exclusive, (evidenced by Pamela's comment, "Fun to us was even walkin down to Barr'd Islands to go to the store") the nature of activities related to work and leisure seem to be different, with leisure activity taking a "back seat" to work activity.

Despite having limited leisure-time activity opportunities, participants did take advantage of what little time they had. When Madge had the opportunity to participate in leisure activity she remembered skating, sliding, skipping, berry picking, playing hopscotch, and playing piddly[7]. Pamela recalled rowing a boat for fun, while sliding and berry picking were common leisure activities for Darlene as well, who also fondly recalled walking to dances in a nearby community. Olive remembered playing hopscotch and catching tiny fish by the seashore, while Pamela, during a member-checking interview, also remembered that playing hopscotch was common among girls. Laura, remembered being able to row "like a son of a gun" and used to be "right at home" scullin (oar)[8] as well. She felt that she "was just as much a Tomboy for that as the boys," and also enjoyed playing piddly and cricket.

Male participants recalled playing sports in their leisure time, such as football (Alex and Andy) and cricket (rounders[9]) (Alex, James and Nick). Both James and Andy also remembered spending time swimming and skating, while Arnold recalled playing

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[7] One of several varieties of children's games which opposing sides play with sticks, variously sized and named, one of which is flicked into the air from a base or goal (Story et al., 1990)
[8] Long oar used to steer or propel a boat (Story et al., 1990)
[9] A ball game similar to baseball, in which players run round a circuit of bases after hitting the ball with a cylindrical wooden bat, scoring a rounder if all four bases are reached before the ball is fielded (Weiner & Simpson, 1991)

piddly. Andy also would row in the summer time, while Nick recalled playing hide 'n seek, copying[10] on pans of ice in the winter, and throwing snowballs.

Although there were no formal recreational facilities of any kind available to participants in their childhood, children in these communities were able to "make their own fun." Laura put it this way, "It was the simple things…you know…all we had to do. Just to make our own…you know, amusement and that, you know." Many leisure activities in fact, involved varying degrees of physical activity, and although relatively primitive in some ways, probably provided a break from the day's typical routine, and enabled children to have some fun. Although boys as well as girls performed certain activities, only boys participated in sports such as football (soccer), and games like skipping rope and hopscotch were played by girls. When asked about the leisure activities of boys and girls during a member checking interview, Alex confirmed that boys "…played the football, they played the baseball, and…rounders…But not so with the girls…they played hopscotch…but…were more to the home…[taking care of] any work that needed to be done around the house…" Olive agreed with this assessment. In her member checking interview she said, "…the boys then used to play ball and stuff like that, eh?", confirming that only boys participated in certain sports.

In combination with a very active work/chore routine, participants had little opportunity to participate in leisure-time activity. When able to, however, participants participated in a variety of activities, many of which were physically active but almost always unstructured and voluntary. In many ways, participants' early work and leisure activity experiences set the foundation of work and leisure activity in adulthood.

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[10] In a child's pastime, the action of leaping from one piece of floating ice to another as the participants follow or copy the leader (Story et al., 1990)

Work Activity During Adulthood

Participants were involved in numerous work-tasks during their childhood and entered the workforce at a relatively young age. As participants aged, they took on more work-related responsibilities. Upon marriage, participants found themselves engaged in activities similar to their parents. Males continued to be involved in fishing, and other manual labour occupations and females continued to perform fishing-related activities as well as more domestic duties.

Certain work routines performed in youth have continued into adulthood. As was typical of many men in his community, James (a retired fisherman) remembered "most always" leaving his community to "go away, somewhere else… lumberwoods and all that" to make some additional money to support his family. Andy, a retired fisherman who spent a few years working on a project in Labrador, also remembered heading off to the lumberwoods in September, before he was married (at age 30). In addition, Arnold was involved in a variety of fishing pursuits (herring, lobsters, as well as cod) and remembered doing, "a lot of work in the woods - lumberwoods." Men in lumber camps were expected to work long hours, and were primarily responsible for cutting timber manually, using a bucksaw. Although data were not provided that specifically addressed female activity in the fall, typical domestic duties performed by women (including housecleaning, childrearing and cooking) were year round responsibilities, and as such continued throughout the year. It was the responsibility of other family members to pick up the slack when the household was missing the husband/father.

Once leaving the lumberwoods in late fall or early winter, men shifted their attention to preparing for the upcoming fishing season. For instance, Alex, who fished

with his grandfather and later owned a boat along with his cousin at around 18 years of age remembered, "…winter time you was, getting ready for the [upcoming fishing season]…there was always something to do. Build a punt, or build somethan." Arnold, recalled,

> if you was fishin…you're getting ready for the fish…mend your nets, trap…trawls, get your...put the hooks on the trawls, and carks on the, on the rope for the nets. And paintin your boats…punts we used to call them small ones…

When the fishing season began, men and women were responsible for a variety of work activities. Fishermen, for their part, were responsible, for any maintenance required on fishing gear/equipment, and spent their days hauling traps and nets by hand, and loading their boats with fish. Once their boats had been filled, they would return to shore where they would unload their catch, and prepare to split and gut their catch.

Once the catch had been split and gutted, the woman's fishing-related responsibilities began. It should be noted that the historical period of which participants speak was a time where women were not permitted to board a fishing boat and fish alongside their husbands/other males, as they were considered to be jinkers[11]. Olive confirmed during a member-checking interview that during her youth women, "didn't go out on the boat." Madge remembered her duties including, "doin fish." She would, "go in [the] stage and…cut their throats…wash it…put it on the flakes[12], and dry it…" From Laura's perspective,

> The women worked harder than the men, because [the women] had all the housework to do, and all the children to take care of, and all the fish to make, and

[11] A person (on a vessel) bringing bad luck; a Jonah (Story et al., 1990)
[12] A platform built on poles and spread with boughs for drying cod-fish on the foreshore (Story et al., 1990)

> the gardens to do…although they [the men] worked hard haulin traps and all this kinda stuff…they didn't work as hard [as women]. And then, e'en when they'd go in stage and do the fish – the women had to be there also…the women had to wash out the fish. 'Cause the men wouldn't be at it…

Darlene had similar work responsibilities and remembered the first thing she would have to do in the morning would be to "go down on the flake. And spread two or three flake-fulls of fish" Continuing, she said,

> …and then…we'd ah, get something on for dinner [lunch]. 'Cause we always cooked dinner [lunch] then…And ah, next thing then we had bread to bake. Or, you know, washin to do, or something like that…It would always be something all day long.

Caring for fish that had been caught was an important responsibility. In a member checking interview, Olive spoke to its importance this way, "…if 'twas goin to rain you'd have to leave [meal preparation] and go out and help to take up all the dry fish." As for men's activity responsibilities relative to women's, Darlene had this to say,

> The men [spent] more time lyin down than the women did, because, well…when their fish was all done they'd come in and lie down." But now women be'd still at it. They [would] still [be] doin their housework or doin something…out weedin, or something. Because we had our…vegetables and everything then…

Member checking interviews brought out this point even more clearly. James admitted, "the men wouldn't have much doin with the youngsters, changing their diapers and stuff, like they do now." Pamela added, "[Women] had to do housework too, because

then…men didn't know anything about housework. You know, that wasn't a thing then, you know."

Once the fishing season had ended, preparation began for winter. Winters were often long, cold, and harsh, and given that houses were fuelled by wood burning ranges or stoves, it was necessary to ensure ample kindling was on hand. Madge, the widow of a fisherman who now lives alone, recalled that it was a man's responsibility to haul wood for the winter with the assistance of a dog team. Once chopped and hauled home, it would need to be cut into shorter lengths with a buckšaw, and then split for burning. Although no data were provided to directly address activities performed by women during the winter months, female activities that were typical of these communities can safely be assumed to have been continuing throughout the year. In addition to these responsibilities, many women became the person primarily responsible for the day-to-day functioning of the household as many men returned to the lumberwoods, as the seasonal cycle of activity started over.

In summary, men were heavily involved in preparing for the fishing season, were responsible for all fish-catching related activities, and also ensured that there was ample food and fuel available. Women were involved in more traditional activities such as meal preparation, child-rearing, and housework, but also heavily involved in fishing-related activities (i.e., fish drying) and other manual labour tasks (i.e., gardening), bolstering the argument that women were more physically active, and did in fact work longer than men.

The historical context in which participants grew up greatly affected physical activity participation. Participants were involved in a variety of physically active tasks related to work activity, leaving little time to pursue leisure-time physical activity.

Having retired from paid work activity, participants currently filled their time carrying out a variety of leisure-time activities. The historical context presented has had implications for the leisure-time activities currently performed by participants.

Current Leisure-Time Activity Participation

Physical Activity and Conceptualization of Health

Participants reported that they were still quite active. This activity however did not fit the definition of physical activity. The definition used by participants to judge whether or not they were active may have been more in line with how Alex saw things. He said, "I was fairly h'active…always very active. And I never did anything…like pushups or something like that, you know…" Alex went on to say that he did think that being physically active was a good idea, for those who weren't "inclined to be out, perhaps fixin the fence…" When asked about "exercises," Pamela, "just figure[d] I'm feeling good… I'm not sittin down all day…" She was not currently doing any "exercises" "only what [she] does …by doing [her] work."

Many participants were unsure what activities they would participate in if they decided to become more physically active, as evidenced by long pauses, followed with no response at all. The most common response was to "do more walking." Darlene however, elaborated and said,

> if I want to go walk I could be walkin everyday if I want to, but, nah. That don't bother me…No, never come, nothing never comes in my mind about no, 'cause I don't, you know…I goes on and dos my own thing, and that's it.

Andy, in the meantime, said he would be, "alright…doing…like [he was] doing now…"

Not everyone could even consider becoming more physically active. Alex said, "I don't think I would be interested. No…I, I don't think. If it was…I mean, I 'spose I'm past that…say it that way." Alex also felt he was "past that" as he commented, "Not really…no, not my age now, I wouldn't…" Trying to make sense of physical activity participation in older adults, Laura commented,

> 'Cause I mean what do they need…to do, for older people anyway? 'Cause you 'aint gonna live that many more years…you're going to die, you know, that's for sure, when the time comes…As long as you can, you know, keep active enough to be able to, ah, you know…keep about and walk about and you know…

During member checking interviews, James echoes similar views. Commenting on riding a bike, he said, "too late…now for to try that."

Comments made related to being "past that" appear to be grounded in issues related to aging. For example, Pamela said, "…and we know no matter what we do we're going to get frail…" Olive saw frailty, as something that "comes with age, I 'spose" while Andy said, "I don't think there'd be, you can do anything about time. Time takes care of it all…gotta come." James, however, was a little less sure, and said, "You'll have to come back in 15 years time and size that up…I don't know, I wouldn't know…"

During member-checking interviews a number of individuals were particularly cogent in expressing their beliefs about taking up physical activity. James felt as though he'd have, "to get the nurse to help [him]" to perform a push-up and feared that "people [would] hurt themselves, doin a lot of walkin." Olive suggested that her activity within the house might be an adequate substitute for other forms of activity,

> …I don't do no exercises, none a'tall. Only in the house, eh? I used to walk the other year, I gave that up 'cause I had gout in me feet then…but I mean, I'm always on the go in the house…

Finally, Alex, "didn't believe in [going for a workout. That's beating yourself out…As soon as you work out you're tired. And I don't think…that's good."

In contrast, Darlene had a different opinion, viewing older adults' deteriorating health as "their own fault in a way" because "they don't exercise enough, and don't…don't get out enough…" Similarly, Arnold commented that there were, "thousands in the grave today…" due to their physical inactivity that "wouldn't be there [if they were physically active]." He elaborated,

> I knows hundreds…on Fogo Island is in the grave. Way younger than I am. Now 'cause when they gets 65 they thinks they got to go to bed and die. Or go into a home somewhere…Then some will say, 'Oh my, I can't do nothing. Can't get out of doors today, [it's] too bad.'

During his member-checking interview, Arnold verified that older adults in his community were, "slowin down because they [were] not active enough" because "they takes it too easy."

Consistent with participants' beliefs regarding health in older adulthood, participants remained sceptical regarding the possible contribution of regular physical activity to health. Madge didn't feel as though it would be beneficial, nor did Olive, "No I wouldn't say 'tis anything…when you gets older, something got to happen, eh?" Nick however, was of a different opinion and said, "sure it [would]" while Andy agreed, "it would be a benefit…"

The study's strongest proponent of physical activity, Arnold, had a number of things to say pertaining to the benefits of physical activity. For Arnold, it was just common sense that, "if you keeps your arms down like that fer six or seven weeks, you're not going to be able to move 'em…" Introspectively, Arnold recognized that when he, "lies down on the couch there so long [he] can hardly get up," but "get movin [and he's] alright then…" In his member-checking interview he reiterated that if he, "…go in there and lie down on that couch now for three or four days [he] wouldn't be able to get out of it." For Arnold, "doing something to keep active [is] what keeps ya active."

With the exception of Arnold, there was agreement among participants with regards to current attempts to be physically active. In summary, participants felt as though physical activity was something they weren't able to do, and was more or less pointless at their age. Clearly, participating in physical activity was not part of participants' aging experience. Other, more sedentary activities have taken priority for these older adults during their post-retirement years, and reveal participants' strategies for living out these years.

Strategies for a Successful Old Age

It is clear from the previous section that participants have not adopted regular physical activity as a means to age successfully. Participants have, however, adopted a couple of alternate strategies in older adulthood as they have made the transition from work-life to retirement. Participants valued keeping busy, as well as taking things easy in their older adult, post-retirement years.

Keeping Busy

Participants perceived themselves as being quite busy throughout their day and appeared to continue to value being occupied, as was the norm in their youth. Idleness was not an option for participants. For instance, Pamela remarked, "I never stop. When I sit down I've got something in my hands…so I won't rust out." She sometimes speculated that people might wonder how she occupied herself, given that she lived alone. However, she was,

> …Not a one that is sittin' down all day long…I never stop, from the time I get up, 'til I go to bed…Around, from seven o'clock in the morning, until around eleven in the night, I'm at something…"

Olive saw her situation similarly, "Me? I never stops…only long enough to go to bed for a nap." Arnold also said he was "on the go…from the time I gets up, [until the] time I goes to bed. As for Darlene, she also said she was, "…always busy…all time…I gets up at six o'clock and six- thirty. And I'm working from that time until twelve, one o'clock in the night."

Madge suggested that, "after they get 65…[people] just probably do little things around…like things around the house, or little things outdoors. Alex also valued keeping busy, and said nowadays he just, "peddles around." Similarly, Laura said, "Rest of the time is just spent, you know…well, what we call foolin around. You know, doin odd jobs around the house…" Hinting at the monotony of day-to-day life, Laura continued, "…You know, it's all just…every day's alike, day in, day out." Nick agreed and referred to retirement activity to be about "punchin time."

During member checking both Olive and Pamela confirmed that they were constantly busy, and "never stopped." Olive said, "I'm always on the go in the house…" Juxtaposed with participants' perceptions of being busy are the views of others who believed that some retired members of the community "don't do very much." Pamela and Darlene both believed that "…the people around here are not doin very much…they're not doin very much."

Taking it Easy

As participants have made the transition from childhood through to adulthood and into retirement, the nature of leisure activity has changed. Sedentary leisure activity, defined here as activities that primarily involve sitting, now dominate how most participants spend their time. Arnold mentioned, for example, that it was common for people of retirement age to, "[go] around to people's houses and play cards." Arnold enjoyed visiting people who were ill, or were otherwise unable to leave their homes, while Alex mentioned he still, "reads a lot," and James still did some woodwork and enjoyed boating and snowmobiling. Meanwhile, Andy enjoyed "go[ing] over to the club sometimes, and drinkin…" and continued to have "a scattered card game."

Although Andy took regular daily walks, and Nick and Darlene still enjoyed berry picking, most participants were currently, as Alex put it, "not active now…" Although he sometimes took a walk "up the road" it was not a regular occurrence, and once he had gone for a walk, "perhaps [he] wouldn't go no more for a week." Similarly, Olive admitted, "I don't walk much I 'spose. I could walk more" while James said he hadn't really done that much in "the last 10, 15 years." Laura admitted that she "don't do any

walking" and added "that's the car after spoiled that…now the car makes it too easy." As for others in her community, she didn't, "see no older people walking."

Female participants reported being involved in different sedentary (non-physically active) tasks than men. For instance, Madge usually did, "a little bit of cookin', washin, things like that…" Pamela knitted, sewed, and crocheted, and was involved in her church. Laura also knitted, sewed, and crocheted. Olive patched quilts, while Darlene hooked rugs, in addition to doing some knitting, and sewing. During a member-checking interview, Olive admitted, "…if I goes away I takes knittin with me, for something to do, eh?"

Retirement for participants has brought on a decline in physical activities and an increase in sedentary activities. As Darlene put it, "…they're retired and they're retired," perhaps referencing in her mind the relatively small amounts of daily physical activity performed by residents of her community, compared to the time spent involved in sedentary activities. Men appeared to be more involved in outdoor leisure activities (albeit sedentary) than were women, but both enjoyed being social. Utilizing productive skills learned in childhood, female participants continued to sew and knit.

The data provided help paint a clearer picture of current leisure-time activity. Simply put, in terms of physical activity, participants were doing very little. Participants valued keeping busy and filling their time with a variety of activities, but were not thinking about current lifestyle habits and how these habits may contribute to their health. Participants failed to consider how leading predominately sedentary lifestyles might affect their health and instead, attributed health declines to old age.

CHAPTER 5. DISCUSSION

Historical Context of Physical Activity

The main purpose of this study was to explore the nature of physical activity participation and perceptions of being physically active among older adults living in rural Newfoundland communities. During analysis, data were interpreted to be reflective of three main data categories: a) Historical Context of Physical Activity, b) Current Leisure-Time Activity Participation, and c) Strategies for a Successful Old Age. Each data category makes an important contribution towards developing a better understanding of the nature of physical activity and the perceptions of being physically active on Fogo Island.

Work Activity in Youth

Data obtained indicate that participants became involved in work activity at a relatively early age. Participants were responsible for providing assistance in the day-to-day operations of the family (e.g., chores) relatively early in life and later became directly involved in the family's fishery-related activities. By the time participants had reached their teens, they were expected to be integrating themselves into the workforce. This early entry into mostly manual labour tasks became a way of life and oftentimes was seen to be vital to survival.

These findings lend support to a study conducted by Allen and Chin-Sang (1990) on the leisure activities of aging black women in the United States. In Allen and Chin-Sang's (1990) study, participants spoke about acquiring a number of work responsibilities at a relatively young age. In Canada, Roadburg (1985) has also found that older adult participants acquired work responsibilities relatively early in life, and were oftentimes too

busy to participate in any leisure activities. Similar to the findings reported by others, the relative brevity of youth leisure experiences for participants in this study has resulted in a prioritization of work activity, at the detriment of leisure activity participation. As will be discussed later, the resulting devaluing of leisure activity has also affected participants' current leisure activity participation.

Perceptions of Work Activity

Participants' early involvement in work activity likely influenced them to begin to prioritize various activities, and make work activity their highest priority. However, this study's data suggest that the reverse explanation is also true. Participants' perceptions of community social norms related to the importance of being involved in work activity likely influenced participants to become primarily involved in work activity during their youth.

Participants recalled parents, grandparents, and neighbours placing great value in putting in a hard day's work. In many cases, participants who were otherwise occupied (e.g., participating in leisure activity) were told they were "wasting their time" by not working and told to go do something "useful" instead. A participant who was perceived to be disinterested in carrying out work activity, or who did not appear to be a hard worker would be ostracized by community members, and branded as lazy; a damning reputation for someone living in a close-knit outport community. The social context in which participants grew up and came of age was a culture of hard work, ruggedness, and determination (Sider, 2003). As a result, work activity held priority over leisure-time activity, which was consequently de-valued. Leisure activity was deemed appropriate only when there was "nothing better to do."

The strongly valued work ethic among outport community members is similar to previous research on the "Protestant Ethic," a concept popularized in the late 1950's by Max Weber (1958). Although it is unlikely that the activity patterns of participants are due to their Protestant faith per se (incidentally 9 out of 10 were Protestant) the apparent attitude of participants has some striking similarities to the Protestant Ethic.

According to the Protestant Ethic, participation in continuous systemic labour is highly valued, while wasting time is considered to be one of the deadliest sins. Participants in this study subscribe to a similar ideal. As mentioned previously, current data would support the idea, at least in a broad sense, that being engaged in work activity was highly valued by the community while wasting time was not. Participants spoke about their perceptions of how community members viewed activity. They provided evidence to support the idea that community members expected work activity to come before fun, and that leisure activity was appropriate only when there wasn't something "better to do." Consequently, the majority of activity carried out by participants throughout the day involved performing work tasks. The perception seemed to be that even one's spare time was better utilized by "doing something useful."

Leisure Activity in Youth

Although bouts of leisure-time activity for participants were relatively brief, and opportunities to participate in leisure activity scarce, it is interesting to note that leisure-time physical activities were the most common leisure activities undertaken by participants in their youth. In a time where little tangible technology existed (e.g., no electricity, no running water, no automobiles) participants made their own fun, and

primarily participated in leisure activities outside the home. Being physically active during one's leisure time was common among participants.

Some of the contextual considerations discussed within work activity have carried over into participant's leisure activity as well. Even in childhood, participants mention carrying out a number of leisure activities that may be, at face value, classified as work activity. This suggests that work and leisure activities were not entirely mutually exclusive. Not surprisingly, young participants placed particular value in performing "productive" activities; those activities that contributed to the family's well-being. Although participating in certain activities purely for fun, other popular activities included those from which the family could collectively benefit. This included such activities as berry picking and the gathering of firewood. Allen and Chin-Sang (1990) have reported similar findings, reporting that older women continued to be involved in "service for others" long after retiring.

This study's data, as well as that of Allen and Chin-Sang (1990) suggest that there was a carry-over of duties previously associated with work activity that has become associated with present day leisure activity. More specifically, this study's data suggest that it is unlikely that participants would ever "walk for the sake of walking;" the idea being that participants are only interested in participating in activities that have some tangible purpose. Having grown up prioritizing work activity over leisure activity, participants currently value leisure activity that is constructive or productive. Therefore, walking is much more likely to be valued as a means to an end (e.g., as a means to obtain berries) rather than as an end in itself.

Work Activity in Adulthood

Not surprisingly, the same values, perceptions and expectations around work activity appeared to carry over to participants' adult working lives as well. Participants were heavily involved in a variety of manual labour tasks in childhood and early adulthood, and continued these types of activity throughout their working lives. It is difficult, however, to ascertain if this fact is a matter of circumstance, or the result of an internalized ethic as already mentioned. Stated another way, it is currently unclear whether "working hard" fostered strong, highly positive values towards it, or whether these feelings were more innate, and consequently influenced individuals to value "hard work." Alternatively, it could be argued that the primary motivation for working hard was simply for survival.

Regardless of the motives for work activity in adulthood, the valuing of "hard work" among older adults is not uncommon (Allen & Chin-Sang, 1990; Roadburg, 1985). The nature of one's work activity experiences during adulthood has implications for one's leisure activity as well. Iso-Ahola (1980) has argued that a dominant Protestant Ethic may make an individual unable to appreciate the value of leisure in later life. If we were to assume more continuity than change in terms of the nature of leisure participation among older adults, as argued by Freysinger (1999) we would expect the current leisure activities of participants to be rather limited.

Current Leisure-Time Activity Participation

It is clear that participants grew up spending relatively little time participating in leisure activity. Participants have suggested that their priorities lay in completing work tasks, and in contributing to the family unit instead. Compared to others who have grown

up in different settings, it is possible that participants in this study may have received far less "leisure socialization." It has been argued elsewhere that exposure to a community's attitudes, norms and values is influential in shaping an individual's attitudes and values towards a given activity (Martin, 2004). As such, it stands to reason that participants in this study would place comparatively less value in leisure activity, given the community's previously discussed views on leisure activity participation. Additionally, from a social psychological perspective, this limited leisure "exposure" would likely affect the likelihood of future participation in leisure activity in later life, through the failure of developing a robust "leisure identity" (Stryker, 1987). This would also help to explain how strong "work socialization" has fostered strong values towards work activity.

Data from this study indicate that participants' childhood leisure experiences have affected their current leisure activity participation. Given limited leisure opportunities in their childhood, participants are currently less flexible in their current leisure activities, and participate in a narrow range of leisure activity. As Iso-Ahola (1980) has written, inactivity in childhood warns of inactivity in adulthood. Participants, having not acquired favourable attitudes toward leisure during these formative years, lack the foundation necessary for participants' satisfactory socialization in older adulthood (Iso-Ahola, 1980).

Strategies for a Successful Old Age

Participants currently find themselves with much more discretionary leisure time, having made the transition from work to retirement. However, this has not translated into increased participation in leisure-time physical activity. This is hardly surprising considering the explanations provided above. Unlike in their youth, during which

participants participated in regular work-time physical activity and sporadic leisure-time physical activity, participants presently spend their discretionary leisure-time performing activities that are mostly sedentary. This has been reported to be the case in other studies involving older adults (Craig et al., 2004; Lee & King, 2003; O'Brien Cousins & Keating, 1995).

A number of explanations can be offered to help understand the relatively low levels of physical activity among older adult participants. As previously discussed, the brevity of childhood leisure experiences, and the prioritization of work activity over leisure activity have created a subsequent devaluing of leisure. Participants are not likely to become regularly physically active in their older adult years, given that they have not participated in leisure-time physical activity on a regular basis during their younger years (Freysinger, 1999). Research by Kelly et al. (1986) would also support the idea that vigorous activities would likely be dropped, given participants' concerns about their changing abilities.

Participants also experienced a number of barriers to physical activity that prevented them from being more physically active. For instance, participants considered many physical activities to be inappropriate for them. This was partially due to the fact that participants considered many physical activities to be too strenuous for them, "[If I did those types of activities] I'd have to put…a tablet under the tongue." This sort of reasoning supports O'Brien Cousins (2000) and Alexandris et al. (2003) who report perceiving oneself unable to perform a given physically active task as a significant barrier to older adult physical activity.

Another partial explanation that hindered participants from participating in physical activity was related to age. Given their current age, participants remarked that community members would "think I was foolish" if they were "out playing sports." The perceived community values towards leisure activity deemed many activities inappropriate for participants. Consequently, participants would not consider engaging in many popular physical activities (i.e., soccer).

In addition to perceived community norms of age appropriate activity, participants also felt as though most physical activities were out of the realm of what was possible for them, citing their age as a barrier to being physically active. One participant remarked, "When you gets older you can't do them things." Participants attributed their inability to perform such activities to their age, reasoning that they're "too old" for that sort of thing. Paradoxically, although participants valued being physically active as a means of promoting health, participants felt as though such activities would not be of benefit to them, citing that they were "past that now." Such barriers to physical activity (i.e., self-stereotyping and paradoxical beliefs) support previous work involving older adult participants (O'Brien Cousins, 2001; 2005).

Participants' current lack of physical activity can also be understood by considering previous physical activity experiences. Participants in this study have mainly participated in physical activity through work. For currently retired participants to maintain previous levels of physical activity (obtained previously through work) participants must now take an active role in replacing work-related physically active tasks with leisure-related physical tasks. Given that participants have few leisure activity experiences from which to draw on, most are unlikely or unwilling to begin participating

in leisure-time physical activity. This does not mean, however, that participants in this study are currently doing nothing.

Participants appear to have made a successful transition from work life to retirement life. Although the work lives of participants involved a variety of physically active tasks, participants have not maintained a similar level of physical activity in their older adult years. Productivity, therefore, would not appear to be dependant on the amount of daily physical activity. Although previous studies have documented society's tendency to push older adults to one side, leaving them without a means to be productive (Marshall, Heinz, Kruger & Verma, 2001; Schaie & Schooler, 1998) there is no evidence to suggest that participants in the present study have had trouble adapting to retirement living. Participants now carry out a variety of meaningful, productive tasks (e.g., berry picking, wood gathering, knitting, sewing) to keep busy throughout their day. Previous research has labelled this phenomenon the "busy ethic" (Ekerdt, 1986), which, like the previously mentioned "Protestant Ethic" (Weber, 1958) and prior research by Allen and Chin-Sang (1990) reports older adults participated in a variety of productive tasks.

Although a lifestyle of carrying out hard work has not been maintained in participants' retirement years, participants have found other ways to maintain a sense of meaning or purpose by remaining productive. Assuming participants perceive other ways to remain productive, it is likely that post-retirement participants would strive to keep themselves busy by participating in a variety of daily activities (Lemon, Bengtson & Peterson, 1972). The present data provide support for this idea. Interestingly, participants felt it was important to be "on the go," perhaps a carry-over from being socialized into an

environment that has stressed an attitude of anti-idleness, again, consistent with the "Protestant Ethic" (Weber, 1958).

Leisure Theory

Consistent with McCormick and McGuire (2004) the data in this study confirms that understanding an individual's past experiences contributes to an understanding of how one experiences their older adult years. Examining the historical context in which participants came of age is an important first step towards understanding participants' current participation in physical activity.

Results from this study also support Iso-Ahola (1980) work that emphasizes the importance of early childhood experiences on leisure participation in later life. In this study, participants had limited opportunities for play in their childhood, given their work activity responsibilities. Consequently, the leisure pursuits of participants were relatively stagnant. The data also substantiate Iso-Ahola's (1980) claim that an individual whose guiding principle becomes the Protestant Ethic, may not be able to appreciate the value of leisure in late life. Finally, data from this study demonstrate continuity of activity in later life, as Freysinger (1999) has claimed. As participants have aged, it has become less likely for them to take up new activities. Rather, participants are involved in activities that have become very familiar to them over the years (e.g., knitting, sewing).

Implications for Health Programming

The results of this study have policy implications and may serve to guide future health intervention strategies. What is perhaps most obvious from these data, is the suggestion that traditional approaches to behaviour change may not be particularly efficacious. Introducing typical fitness centers to this area, for example, is unlikely to

have the desired effect. Similarly, immediately implementing fitness classes or efforts to create typical recreational programming geared towards getting older adults moving are also likely to fail. The findings of this study suggest that participants will most likely demonstrate a willingness to participate in activity that is deemed to be relevant and suitably purposeful or productive. Miller (1965) writes that mere activity is not sufficient, and that in order for leisure activities to be appealing, they must be infused with aspects of work activity that are culturally esteemed. To incorporate physical activity into older adults' current lifestyle, the rationale to do so must be over and above the statement "because it's good for you."

What may be more effective are interventions that introduce physical activities perceived to be purposeful. That is, activities that are viewed to have productive, tangible outcomes (e.g., walking to picking berries). At a community level, on Fogo Island, this may involve the creation of projects that give older residents the opportunity to use their work skills to benefit the community as a whole. As an example, residents may be interested in lending a hand in the cutting of timber, if it could be collectively shared as a fuel source, or alternatively if the timber was to be converted to lumber to construct boardwalks, recreational centres, etc.

From a broader-based population health standpoint, health education is required before any health gains are likely to be made (Glanz et al., 2002). A probable precursor to any behaviour change, an educational program aimed at teaching older adults living on Fogo Island that it is never too late to make health gains, and that physical frailty is not an inevitable consequence of aging is also necessary. Such an education programme will need to convince older adults that they can improve their aging experience.

It is also clear that the socio-cultural environment of these communities plays a vital role in determining the appropriateness of any activity. A community will need to value leisure-time physical activity as a viable way to promote health, but also and perhaps more importantly, come to view such activity as appropriate for older adults. Older adults must first value physical activity to change the aging experience. They must also believe they can promote health through engaging in physical activity during even their most senior years, and believe that others feel as though it is appropriate to do so. An effective educational programme that embraces the strong work culture, and uses it to create a variety of socially appropriate activity options for older adults, will be most likely to initiate health gains in these areas. Educational programmes that focus on older adult physical activity that can benefit the community at large (e.g., wood cutting projects) may be particularly successful.

Future Directions

This study is a preliminary step towards enriching the understanding of the nature of physical activity in rural Newfoundland. A follow-up, larger-scale qualitative study focused on developing a grounded theory of ways to promote physical activity participation in rural Newfoundland is a logical next step towards furthering the understanding of physical activity in rural Newfoundland. Such a study would sample a larger number of participants from a number of rural areas in Newfoundland. Once a theory has been developed, it will be important to test it. At this point, additional quantitative work focusing on the development of a survey that tests the theoretical constructs of the theory will be necessary. Once the survey has been developed and validated, a large-scale quantitative study would be appropriate to sample across the

province/Atlantic Canada, to assess the theoretical constructs and subsequent generalizability of the data.

These series of studies would assist in developing a rich understanding of physical activity in rural Newfoundland/Atlantic Canada. Research studies such as those above will inform future health policy development, as well as health promotion campaigns aimed at improving population health via increased physical activity participation among older adults.

Strengths & Weaknesses

The small sample size limits the generalizability of the findings. This is a fair criticism, and one must understand that it is presently unclear if the findings of this study can be extended to other populations. However, the focus of this study was to collect rich data that helped clarify the nature of physical activity and to examine beliefs about being physically active, among the participants that agreed to take part in the study. Despite a relatively small number of participants, a wealth of information has been collected on the nature of physical activity participation and perceptions of being physically active among participants. The sampling strategy of this study was to sample these ideas, and not to sample individuals per se (Strauss & Corbin, 1998).

In addition, this study could also be criticized for obtaining data from a seemingly minute and obscure sub-set of Canada's population. However, this study's position is that information obtained from rural, older adult Newfoundlanders is equally as valuable as information obtained from any other population, especially given the relatively high rates of several chronic diseases among older adult Newfoundlanders. This study has obtained a rich description of participants' activity throughout their lifetime and helps shed light

on the issue of physical activity/inactivity in their communities. This study has given otherwise "silent" participants a voice from which to relate their experiences and beliefs about physical activity.

The fact that participants may not have recalled events from the past accurately or the possibility that participants' present-day thoughts on particular issues may not be an accurate representation of how they viewed things in the past is another issue of concern for the present study. Although concerns about retrospective recall are legitimate, the interviews conducted indicate that participants report having a number of experiences in common. This fact helps strengthen the argument that the information collected from participants is in fact trustworthy.

A final criticism that may be directed towards this study involves the quality of interpretations presented. The beginner researcher, without a wealth of data collected and analysis experience is likely not to complete as thorough, and perhaps not as accurate a job in his or her interpretations as compared to more seasoned researchers. However, this beginner researcher's close ties with the area being researched has provided him with a number of distinct advantages, as discussed previously. In addition, the interpretations and analysis carried out for the purposes of this study have been completed under the guidance of several experienced researchers.

Summary

Lifestyle research often fails to give adequate attention to notable contextual or ecological factors that may support or undermine participation in regular physical activity (Grzywacz & Marks, 2001) The results of this study, however, draw particular attention to contextual and local cultural considerations of physical activity participation.

This study's purpose was to explore the nature of physical activity participation and perceptions of being physically active among older adults in rural Newfoundland communities. Results from this study help describe past as well as current physical activity. As can be seen by the data, the picture provided is a complex one, interwoven with a variety of contextual influences. Further research is required to obtain a more complete representation of the nature of physical activity in rural Newfoundland, but this study's findings offer insight into current thoughts and perceptions around being physically active, into being older, into meeting the community's perceived expectations towards performing appropriate activities and into the value placed in engaging in "productive" activities on Fogo Island.

Results from this study help clarify current physical activity participation, as well as offer insight into the values associated with leisure-time physical activity. The identification of three main data categories (Historical Context of Physical Activity, Current Leisure-Time Activity Participation, and Strategies for a Successful Old Age) help increase understanding of the perceptions of being physically active, as well as current physical activity participation among older adults on Fogo Island.

A number of contextual influences were identified that influenced the nature of physical activity participation in these areas. To improve upon the physical inactivity in these areas, interventions will need to be sensitive to ageist beliefs, social norms of activity, and a history/culture of working hard. Although preliminary in nature, this study helps draw into focus what current life is like for older adults in rural Newfoundland, and their thoughts about being physically active.

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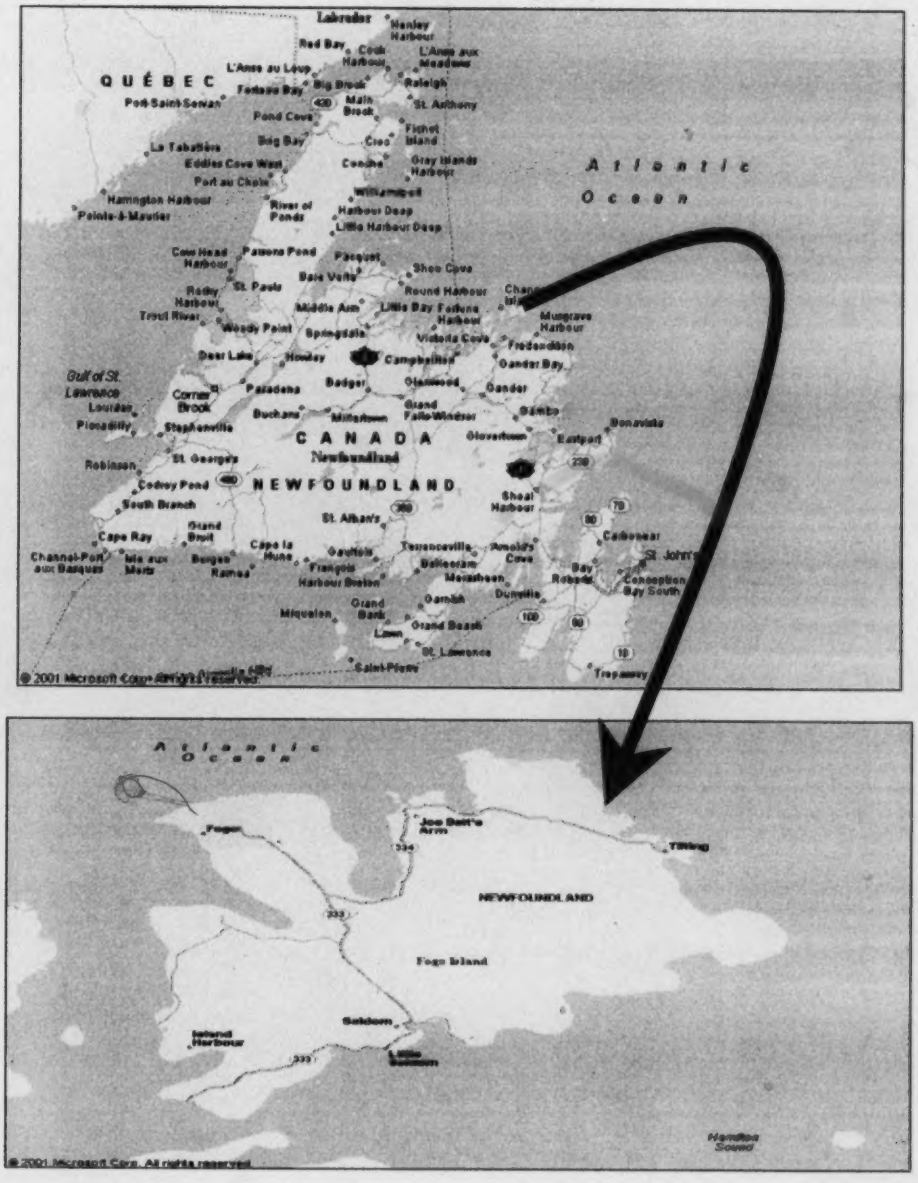
Appendix A: Fogo Island, Newfoundland & Labrador


Labrador
Henley Harbour
Red Bay
Cook Harbour
L'Anse aux Meadows
QUÉBEC
L'Anse au Loup
Fontaine Bay
Big Brook
Raleigh
Pork Saint Servan
Main Brook
St. Anthony
Pond Cove
Fishot Island
La Tabatière
Big Bay
Croc
Eddies Cove West
Conche
Gray Islands Harbour
Atlantic Ocean
Port au Choix
Hamington Harbour
Pointe-à-Maulier
River of Ponds
Harbour Deep
Little Harbour Deep
Cow Head Harbour
Pasuca Pond
Pacquet
Shoe Cove
Bale Verte
Round Harbour
Rocky Harbour
St. Paul's
Trout River
Middle Arm
Little Bay Fortune Harbour
Woody Point
Springdale
Victoria Cove
Deer Lake
Howley
Campbellton
Gander Bay
Gulf of St. Lawrence
Pasadena
Badger
Glenwood
Gander
Corner Brook
Lourdes
Buchans
Millertown
Grand Falls-Windsor
Bishop's Falls
Piccadilly
Stephenville
CANADA
Newfoundland
Glovertown
Eastport
Bonavista
Robinson
St. George's
NEWFOUNDLAND
Codroy Pond
Shoal Harbour
South Branch
St. Alban's
Grand Bruit
Cape Ray
Cape la Hune
Terranceville
Arnold's Cove
Carbonear
St. John's
Channel-Port aux Basques
Ile aux Morts
Burgeo
Ramea
Gaultois
François
Harbour Breton
Baltiscam
Merasheen
Bay Roberts
Conception Bay South
Dunville
Garnish
Grand Bank
Miquelon
Grand Beach
Lawn
St. Lawrence
Saint-Pierre
Trepassey
© 2001 Microsoft Corp. All rights reserved.
Atlantic Ocean
Fogo
Joe Batt's Arm
Tilting
NEWFOUNDLAND
Fogo Island
Seldom
Hamilton Sound
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Fogo Island, Newfoundland & Labrador

Accessible only by ferry, Fogo Island is an island off the Northeast coast of the island of Newfoundland, 24 kilometres in length and 14.5 kilometres wide. There are nine major communities on Fogo Island that have a combined population of approximately 3500 (Mellin, 2003). Settled approximately 350 years ago, residents have traditionally been involved in fishery-related activities, but in more recent years, since the cod moratorium, increasing numbers of people have been forced to seek employment elsewhere. There is one public school on the island (that serves K-12 students), one pharmacy, one bank, as well as one relatively small hospital that does not perform surgeries or deliver babies. Interestingly, there are two long-term care facilities. Although this area has a number of walking trails, and a park area, there are no formal recreational facilities, other than a centrally located hockey arena.

Appendix B: Information Letter

Appendix C: Consent Form

Appendix D: Interview Guide

Interview Guide/Possible Interview Questions

INTRO: Name, current research, areas of interest, request to record, explanation of analysis, publication, etc.

Part I – Current Situation

AGE	In what year were you born?
CONTEXT	How long have you lived in this community? *Probe:* Who do they live with, dwellings
HEALTH	Compared to others your age, how would you describe your present health? *Probe:* health issues, medication use if appropriate, chronic conditions
LEISURE CULTURE	What do older people here do in their free time? What kind of work, if any, do older people do in this community? What kinds of things do YOU do? Work? Free time? Probe: Other family members/friends
P.A. (GUIDE)	Here is Health Canada's Physical Activity Guide for Older Adults. Have you ever seen this document? Read it? If no, review key themes briefly (a variety of P.A. 30-60 minutes everyday). Is this a realistic expectation for you? Why or why not? Do you think you were meeting expectations in your youth? Currently? Does PA benefit the old just as much as it does the old? Do you think that being regularly involved in physical activity may be a way to prevent physical frailty? Are there images that come to mind when I talk about exercise?

Part II – Life Course Situation

YOUNG LEISURE CHOICES	Tell me a story about what it was like to be a kid in this community. What did you do for fun?
LIFE COURSE ACTIVITY CHANGE	Would you say you were a physically active child/teenager? What *Probe:* Games, school/church activities *Probe:* Others play?

What things did you not get to do that you would have, if you had lived elsewhere? (mainland, a city, etc.)
Would you say you are as active now as you were then? Why? Why not?
In terms of your activity, how have things changed over the years? If less active, why do you think this is the case for you? Would you be likely to say that hard work never hurt anyone?

CURRENT HEALTH INTERPRETATION

What about your health situation? Is your health as good, not as good, or better than those your own age?
How physically active are you currently?
Do you think there are things you could do to improve your health?
What do you think has affected your well-being over the years? Are there things that have made your health better/worse?
Has your work activity helped your health?
Do you think being more physically active would be of benefit to you?
How might being physically active improve one's health?
Has your doctor ever recommended you become more active?
Do you think it is possible for you to become more active? Why?/Why not?
If you decided to become more active, what are some of the things you would like to do?
Do you think there were differences in activity between men and women? Were women just as active as men?
In terms of health benefit, do you think there'd be a difference between performing physical work such as fishing and doing exercises on your own?
Is there a difference between being "active" and "busy?

COMMUNITY CULTURE

Do you think there are things about your home community that make it easier/more difficult to be active? Is it easier to be active elsewhere? Why/Why not? Is your home community/are other areas more supportive or less supportive of older adults? Could you be healthier if you lived in another area? If a group of people your age decided to have a game of football…What would passer-bys from the community be likely to say/think? When you were growing up and would play games as a child, would your parents or grandparents be likely to view this as time well spent, or a waste of time?

Many people will say that they find themselves slowing down as they grow older. Do you think this is entirely due to aging, or could other things contribute to this slowing down? Do you think people have the tendency to slow down once they retire?

Thank you for helping me in this interview [Discuss possibility of follow-up interview]. Would you be interested in obtaining my study's results? [obtain mailing address]